Docker Commands

- **Docker Version**
- **Docker Run**

- **Docker images**


```
ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28          OPEN PORT

Memory                                    CPU
6.17% (246.9MiB / 3.906GiB)               0.17%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play  🗐

DELETE    📄 EDITOR
```

```
[node1] (local) root@192.168.0.28 ~
$ docker run python
Unable to find image 'python:latest' locally
latest: Pulling from library/python
b0248cf3e63c: Pull complete
127e97b4daf7: Pull complete
0336c50c9f69: Pull complete
1b89f3c7f7da: Pull complete
2d6277217976: Pull complete
273fcda609d8: Pull complete
58568d3a3a00: Pull complete
56fc9fb54f6e: Pull complete
8a22f29afe36: Pull complete
Digest: sha256:f7382f4f9dbc51183c72d621b9c196c1565f713a1fe40c119d215c961fa22815
Status: Downloaded newer image for python:latest
[node1] (local) root@192.168.0.28 ~
$ docker images
REPOSITORY      TAG        IMAGE ID       CREATED        SIZE
```

- **Docker ps**
- **Docker ps -a**
- **Docker stats**


```
ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28            OPEN PORT

Memory                                          CPU
6.17% (246.9MiB / 3.906GiB)                     0.48%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play

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```
[node1] (local) root@192.168.0.28 ~
$ docker images
REPOSITORY     TAG       IMAGE ID      CREATED        SIZE
python         latest    4665a951a37e  13 days ago    921MB
hello-world    latest    feb5d9fea6a5  19 months ago  13.3kB
[node1] (local) root@192.168.0.28 ~
$ docker ps
CONTAINER ID   IMAGE     COMMAND    CREATED    STATUS    PORTS    NAMES
[node1] (local) root@192.168.0.28 ~
$ docker ps -a
CONTAINER ID   IMAGE         COMMAND     CREATED        STATUS                  PORTS    NAMES
a5272b39f90e   python        "python3"   3 minutes ago  Exited (0) 3 minutes ago         gallant_matsumoto
1160f038d395   hello-world   "/hello"    9 minutes ago  Exited (0) 9 minutes ago         clever_hypatia
[node1] (local) root@192.168.0.28 ~
CONTAINER ID   NAME      CPU %    MEM USAGE / LIMIT    MEM %    NET I/O    BLOCK I/O    PIDS
^Z
[1]+  Stopped              docker stats
[node1] (local) root@192.168.0.28 ~
```

- **Docker pull**
- **Docker run -it -d <imagename>**


```
ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28            OPEN PORT

Memory                                          CPU
6.17% (247MiB / 3.906GiB)                       1.06%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play

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```

```
[node1] (local) root@192.168.0.28 ~
$ docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
2ab09b027e7f: Pull complete
Digest: sha256:67211c14fa74f070d27cc59d69a7fa9aeff8e28ea118ef3babc295a0428a6d21
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
[node1] (local) root@192.168.0.28 ~
$ docker run -it -d ubuntu
72dac711a2a533ea22646f10da132d72480afd996b4ca306bb4f1267daad0a1e
[node1] (local) root@192.168.0.28 ~
$ docker ps
CONTAINER ID   IMAGE     COMMAND      CREATED        STATUS         PORTS    NAMES
72dac711a2a5   ubuntu    "/bin/bash"  8 seconds ago  Up 6 seconds            sleepy_jemison
[node1] (local) root@192.168.0.28 ~
$ docker ps -a
CONTAINER ID   IMAGE         COMMAND      CREATED        STATUS                  PORTS    NAMES
```

- **Docker exec -it <container id> bash**
- **Linux: ls, ls -l, exit**


```
$ docker ps -a
CONTAINER ID   IMAGE         COMMAND        CREATED         STATUS                     PORTS    NAMES
72dac711a2a5   ubuntu        "/bin/bash"    28 seconds ago  Up 26 seconds                       sleepy_jemison
4f0c5699b5b0   4665a951a37e  "python3"      6 minutes ago   Exited (0) 6 minutes ago            pythonContainer
a5272b39f90e   python        "python3"      11 minutes ago  Exited (0) 11 minutes ago           gallant_matsumoto
1160f038d395   hello-world   "/hello"       18 minutes ago  Exited (0) 17 minutes ago           clever_hypatia
[node1] (local) root@192.168.0.28 ~
$ docker exec -it 72dac711a2a5 bash
root@72dac711a2a5:/#
root@72dac711a2a5:/#
root@72dac711a2a5:/# ls
bin  boot  dev  etc  home  lib  lib32  lib64  libx32  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@72dac711a2a5:/# ls -l
total 0
lrwxrwxrwx   1 root root    7 Mar  8 02:05 bin -> usr/bin
drwxr-xr-x   2 root root    6 Apr 18  2022 boot
drwxr-xr-x   5 root root  360 Apr 25 08:16 dev
drwxr-xr-x   1 root root   66 Apr 25 08:16 etc
```



```
drwxr-xr-x     2 root root   6 Apr 18  2022 boot
drwxr-xr-x     5 root root 360 Apr 25 08:16 dev
drwxr-xr-x     1 root root  66 Apr 25 08:16 etc
drwxr-xr-x     2 root root   6 Apr 18  2022 home
lrwxrwxrwx     1 root root   7 Mar  8 02:05 lib -> usr/lib
lrwxrwxrwx     1 root root   9 Mar  8 02:05 lib32 -> usr/lib32
lrwxrwxrwx     1 root root   9 Mar  8 02:05 lib64 -> usr/lib64
lrwxrwxrwx     1 root root  10 Mar  8 02:05 libx32 -> usr/libx32
drwxr-xr-x     2 root root   6 Mar  8 02:05 media
drwxr-xr-x     2 root root   6 Mar  8 02:05 mnt
drwxr-xr-x     2 root root   6 Mar  8 02:05 opt
dr-xr-xr-x 1519 root root   0 Apr 25 08:16 proc
drwx------     2 root root  37 Mar  8 02:08 root
drwxr-xr-x     5 root root  46 Mar  8 02:08 run
lrwxrwxrwx     1 root root   8 Mar  8 02:05 sbin -> usr/sbin
drwxr-xr-x     2 root root   6 Mar  8 02:05 srv
dr-xr-xr-x    13 root root   0 Mar 27 06:27 sys
drwxrwxrwt     2 root root   6 Mar  8 02:08 tmp
```

ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28

[OPEN PORT]

Memory
6.16% (246.2MiB / 3.906GiB)

CPU
0.04%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play

[DELETE] [EDITOR]

```
drwxrwxrwt    2 root root   6 Mar  8 02:08 tmp
drwxr-xr-x   14 root root 160 Mar  8 02:05 usr
drwxr-xr-x   11 root root 139 Mar  8 02:08 var
root@72dac711a2a5:/# cd ..
root@72dac711a2a5:/# docker stop 72dac711a2a5
bash: docker: command not found
root@72dac711a2a5:/# exit
exit
[node1] (local) root@192.168.0.28 ~
$ docker ps -a
CONTAINER ID   IMAGE          COMMAND       CREATED         STATUS                    PORTS    NAMES
72dac711a2a5   ubuntu         "/bin/bash"   3 minutes ago   Up 3 minutes                       sleepy_jemison
4f0c5699b5b0   4665a951a37e   "python3"     10 minutes ago  Exited (0) 10 minutes ago          pythonContainer
a5272b39f90e   python         "python3"     15 minutes ago  Exited (0) 15 minutes ago          gallant_matsumoto
1160f038d395   hello-world    "/hello"      21 minutes ago  Exited (0) 21 minutes ago          clever_hypatia
```

- **Docker search**

ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28

[OPEN PORT]

Memory
6.16% (246.2MiB / 3.906GiB)

CPU
0.01%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play

[DELETE] [EDITOR]

```
[node1] (local) root@192.168.0.28 ~
$ docker search MySQL
NAME                         DESCRIPTION                                  STARS   OFFICIAL   AUTOMATED
mysql                        MySQL is a widely used, open-source relation…  14069   [OK]
mariadb                      MariaDB Server is a high performing open sou…  5369    [OK]
phpmyadmin                   phpMyAdmin - A web interface for MySQL and M…  785     [OK]
percona                      Percona Server is a fork of the MySQL relati…  606     [OK]
bitnami/mysql                Bitnami MySQL Docker Image                     86                 [OK]
databack/mysql-backup        Back up mysql databases to... anywhere!        82
linuxserver/mysql-workbench                                                 49
ubuntu/mysql                 MySQL open source fast, stable, multi-thread…  46
linuxserver/mysql            A Mysql container, brought to you by LinuxSe…  38
circleci/mysql               MySQL is a widely used, open-source relation…  29
google/mysql                 MySQL server for Google Compute Engine         23                 [OK]
rapidfort/mysql              RapidFort optimized, hardened image for MySQL  14
bitnami/mysqld-exporter                                                     5
vitess/mysqlctld             vitess/mysqlctld                               1                  [OK]
newrelic/mysql-plugin        New Relic Plugin for monitoring MySQL databa…  1                  [OK]
```

- **Docker pull**

ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28   OPEN PORT

Memory
6.16% (246.3MiB / 3.906GiB)

CPU
0.05%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play

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```
newrelic/mysql-plugin          New Relic Plugin for monitoring MySQL databa…   1        [OK]
ilios/mysql                    Mysql configured for running Ilios              1        [OK]
rapidfort/mysql-official       RapidFort optimized, hardened image for MySQ…   0
bitnamicharts/mysql                                                            0
mirantis/mysql                                                                 0
docksal/mysql                  MySQL service images for Docksal - https://d…   0
rapidfort/mysql18-ib           RapidFort optimized, hardened image for MySQ…   0
cimg/mysql                                                                     0
eclipse/mysql                  Mysql 5.7, curl, rsync                          0        [OK]
drud/mysql                                                                     0
hashicorp/mysql-portworx-demo                                                  0
[node1] (local) root@192.168.0.28 ~
$ docker pull --platform linux/x86_64 mysql
Using default tag: latest
latest: Pulling from library/mysql
328ba678bf27: Pull complete
f3f5ff008d73: Pull complete
dd7054d6d0c7: Pull complete
```

ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28   OPEN PORT

Memory
6.16% (246.3MiB / 3.906GiB)

CPU
0.09%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play

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```
f3f5ff008d73: Pull complete
dd7054d6d0c7: Pull complete
70b5d4e8750e: Pull complete
cdc4a7b43bdd: Pull complete
a0608f8959e0: Pull complete
5823e721608f: Pull complete
a564ada930a9: Pull complete
539565d00e89: Pull complete
a11a06843fd5: Pull complete
92f6d4aa041d: Pull complete
Digest: sha256:a43f6e7e7f3a5e5b90f857fbed4e3103ece771b19f0f75880f767cf66bbb6577
Status: Downloaded newer image for mysql:latest
docker.io/library/mysql:latest
[node1] (local) root@192.168.0.28 ~
$ docker images
REPOSITORY    TAG      IMAGE ID       CREATED       SIZE
mysql         latest   8189e588b0e8   7 days ago    564MB
python        latest   4665a951a37e   13 days ago   921MB
```

- **Docker stop**
- **Docker restart**
- **Docker rename**
-

ch3ofp2e_ch3og781k7jg00eijkug

IP
192.168.0.28   OPEN PORT

Memory
6.16% (246.3MiB / 3.906GiB)

CPU
0.02%

SSH
ssh ip172-18-0-26-ch3ofp2e69v0008i29ug@direct.labs.play 📋

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```
python        latest    4665a951a37e   13 days ago      921MB
ubuntu        latest    08d22c0ceb15   6 weeks ago      77.8MB
hello-world   latest    feb5d9fea6a5   19 months ago    13.3kB
[node1] (local) root@192.168.0.28 ~
$ docker ps -a
CONTAINER ID   IMAGE          COMMAND       CREATED          STATUS                    PORTS       NAMES
72dac711a2a5   ubuntu         "/bin/bash"   7 minutes ago    Up 7 minutes                          sleepy_jemison
4f0c5699b5b0   4665a951a37e   "python3"     14 minutes ago   Exited (0) 13 minutes ago             pythonContainer
a5272b39f90e   python         "python3"     19 minutes ago   Exited (0) 19 minutes ago             gallant_matsumoto
1160f038d395   hello-world    "/hello"      25 minutes ago   Exited (0) 25 minutes ago             clever_hypatia
[node1] (local) root@192.168.0.28 ~
$ docker stop 1160f038d395
1160f038d395
[node1] (local) root@192.168.0.28 ~
$ docker restart 1160f038d395
1160f038d395
[node1] (local) root@192.168.0.28 ~
$ docker rename hello-world hey
```