

## POWER OF DOCKER

(Just a glimpse)

Command: `docker run -i centos:7 date`

What did this command do? As per the image, just the date command was run, which could have been done using the `#date` instead of writing such a big command.

```
[root@localhost ~]# docker run -i centos:7 date
Thu Oct 29 16:15:46 UTC 2020
[root@localhost ~]# docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED
ea8ad2582517	centos:7	"date"	9 seconds ago
Exited (0) 6 seconds ago		vigorous_swirles	
cde3e847780c	centos:7	"/bin/bash"	7 minutes ago
Exited (0) 4 minutes ago		eager_cray	

In reality, the highlighted command:

- Launches centos OS of version 7
- Runs it
- Runs the date command
- Exits

But, why should you believe the lines that I have just written? The answer is simple, because I have proof.

```
Exited (255) 8 weeks ago
[root@localhost ~]# docker run -i centos:7 date
Thu Oct 29 16:16:56 UTC 2020
[root@localhost ~]#
```

Command: `docker ps -a`

```
[root@localhost ~]# docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED
ea8ad2582517	centos:7	"date"	9 seconds ago
Exited (0) 6 seconds ago		vigorous_swirles	

The above command is used to show all the os that has been active sometime in history via docker. When you run the command, you can see a centos was launched 9 seconds ago. We didn't see any OS launching. But, it did launch, the date command was run and then it shut down. The best part is that, all of it happened within seconds. This is the real power of docker.

## Alias:

While working on Linux, we come over some really lengthy commands that needs to be used quite often. To get over typing the long commands over and over, we can give a nickname to then using the alias keyword.

Command `alias d='docker rm `docker ps -q -a`'`

```
[root@localhost ~]# alias d='docker rm `docker ps -q -a` '
[root@localhost ~]#
```

Command `docker ps -a`

```
Exited (255) 6 weeks ago
[web
[root@localhost ~]# docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED
STATUS        PORTS         NAMES
cf3c3d7c6f5f   centos:7      "date"                  35 minutes ago
Exited (0) 35 minutes ago           laughing_jepsen
ea8ad2582517   centos:7      "date"                  36 minutes ago
Exited (0) 36 minutes ago           vigorous_swirles
cde3e847780c   centos:7      "/bin/bash"            44 minutes ago
Exited (0) 41 minutes ago           eager_cray
31f15b802773   centos:7      "/bin/bash"            26 hours ago
Exited (137) 24 hours ago           sk_os
d39f34c30205   ubuntu:14.04  "/bin/bash"            2 days ago
Exited (0) 2 days ago           serene_kapitsa
37f47a49a8e8   ubuntu:14.04  "/bin/bash"            2 days ago
Exited (0) 2 days ago           pedantic_perlman
59a7e378460b   centos:7      "/bin/bash"            7 days ago
Exited (137) 7 days ago           brave_yalow
f466cffdb677   ubuntu:14.04  "/bin/bash"            7 days ago
Exited (0) 7 days ago           elated_snyder
8f98d9787bab   ubuntu:14.04  "/bin/bash"            7 days ago
Exited (0) 7 days ago           awesome_heyrovsky
4573ed80c4d1   ubuntu:14.04  "/bin/bash"            4 weeks ago
```

It shows multiple os has been run, and now I want to delete the list.

Command to remove os: `docker rm os_name`

Container id of all the os running: `docker ps -q -a`

```
[root@localhost ~]# docker ps -a -q
cf3c3d7c6f5f
ea8ad2582517
cde3e847780c
31f15b802773
d39f34c30205
37f47a49a8e8
59a7e378460b
f466cffdb677
8f98d9787bab
4573ed80c4d1
2cda16b17c74
db98766488f8
b9f3321faaeb
ef6300ed521c
8ac336dd3900
7f9d02aebdea
dbcc070053e7
553983114ab5
[root@localhost ~]#
```

Using alias, we combine both the above commands and name it `d`. Now when we type `d`, all the history of the os will get deleted.

```
[root@localhost ~]# alias d='docker rm `docker ps -q -a` '
[root@localhost ~]#
```

Using d to remove history

```
[root@localhost ~]# alias d='docker rm `docker ps -q -a` '
[root@localhost ~]# d
cf3c3d7c6f5f
ea8ad2582517
cde3e847780c
31f15b802773
d39f34c30205
37f47a49a8e8
59a7e378460b
f466cffdb677
8f98d9787bab
4573ed80c4d1
2cda16b17c74
db98766488f8
b9f3321faaeb
ef6300ed521c
8ac336dd3900
7f9d02aebdea
dbcc070053e7
553983114ab5
[root@localhost ~]# docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED
STATUS            PORTS              NAMES
[root@localhost ~]#
```

Enterprise Linux

Again using `docker ps -a`, we don't see any list. It means, we have been successful.