



Name : Chandan Kumar Reddy E

Program : DevOps for Beginners

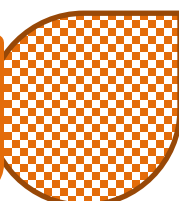
Date : Aug 15, 2021

eMail: ckrcisco@gmail.com

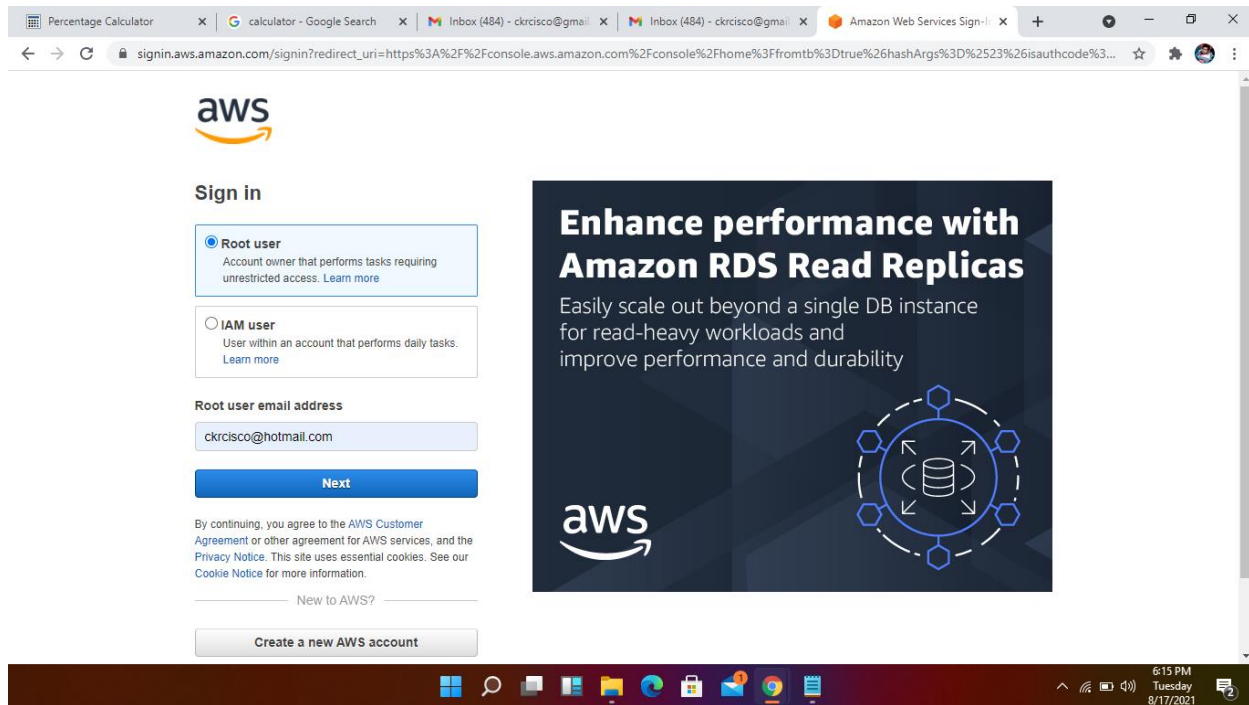
## Title: DevOps Essentials Assignment Day – 2

### Assignment Task:

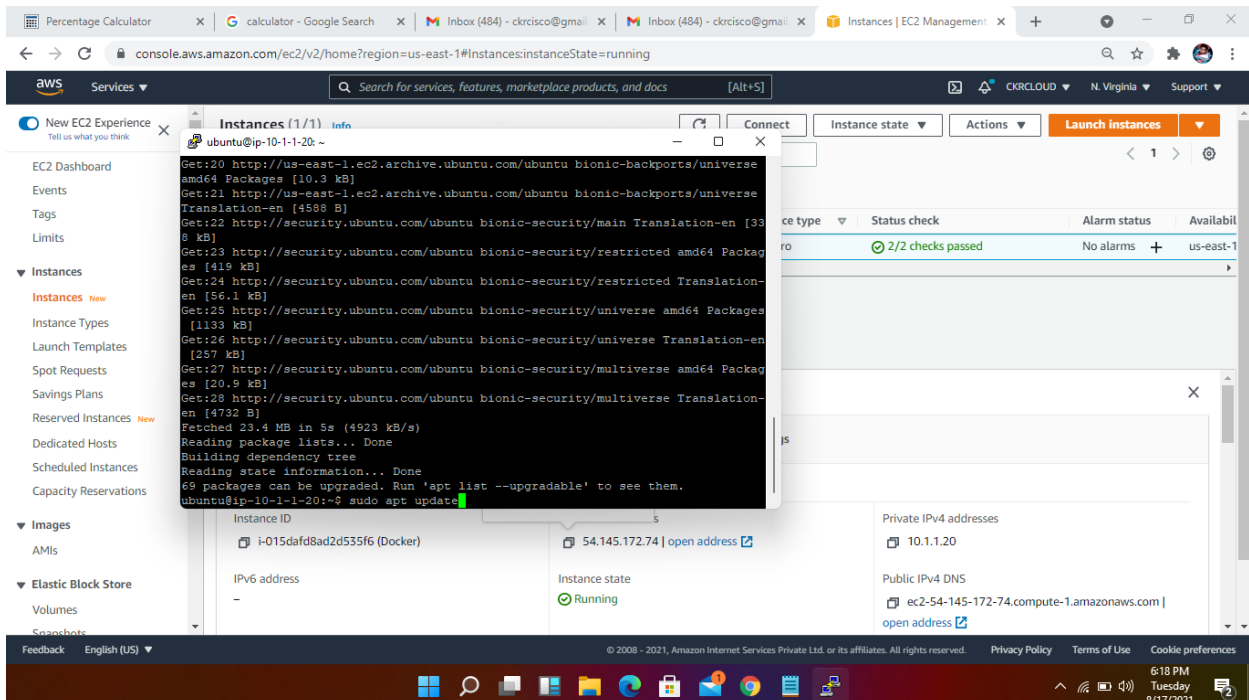
- Create An AWS Ec2 Instance
- Sudo Yum Update
- Sudo Yum Install Docker
- Docker --version
- service docker start
- service docker stop
- service docker status
- docker run hello-world
- docker run -it ubuntu bash
- Working With Volumes
- docker volume create
- docker volume inspect
- docker volume rm volid
- docker docker ls
- service docker stop



- Create An AWS Ec2 Instance



- Sudo Yum Update



- Sudo Yum Install Docker

```
root@ip-10-1-1-188~  
Verifying : 1:grub2-pc-2.06-2.amzn2.0.1.x86_64 26/29  
Verifying : kernel-tools-4.14.238-182.422.amzn2.x86_64 26/29  
Verifying : libcurl-7.61.1-12.amzn2.0.4.x86_64 27/29  
Verifying : 1:grub2-pc-modules-2.06-2.amzn2.0.1.noarch 28/29  
Verifying : grubby-8.28-23.amzn2.0.1.x86_64 29/29  
  
Installed:  
grub2.x86_64 1:2.06-2.amzn2.0.3  
grub2-pc.x86_64 1:2.06-2.amzn2.0.3  
grub2-tools.x86_64 1:2.06-2.amzn2.0.3  
grub2-tools-efi.x86_64 1:2.06-2.amzn2.0.3  
grub2-tools-extra.x86_64 1:2.06-2.amzn2.0.3  
grub2-tools-minimal.x86_64 1:2.06-2.amzn2.0.3  
kernel.x86_64 0:4.14.243-185.433.amzn2  
  
Updated:  
curl.x86_64 0:7.76.1-4.amzn2.0.1  
ec2-utils.noarch 0:1.2-45.amzn2  
grub2-common.noarch 1:2.06-2.amzn2.0.3  
grub2-efi-x64-ec2.x86_64 1:2.06-2.amzn2.0.3  
grub2-pc-modules.noarch 1:2.06-2.amzn2.0.3  
grubby.x86_64 0:8.28-23.amzn2.0.2  
kernel-tools.x86_64 0:4.14.243-185.433.amzn2  
libcurl.x86_64 0:7.76.1-4.amzn2.0.1  
systemtap-runtime.x86_64 0:4.4-1.amzn2.0.2  
  
Replaced:  
grub2.x86_64 1:2.06-2.amzn2.0.1 grub2-tools.x86_64 1:2.06-2.amzn2.0.1  
  
Complete!  
[root@ip-10-1-1-188 ~]# curl -fsSL https://get.docker.com -o get-docker.sh  
[root@ip-10-1-1-188 ~]# sh get-docker.sh  
# Executing docker install script, commit: 0e85c6ac0bdd7b2ba7bcaae519746ad249a29  
  
ERROR: Unsupported distribution 'amzn'  
  
[root@ip-10-1-1-188 ~]# sudo sh get-docker.sh  
# Executing docker install script, commit: 0e85c6ac0bdd7b2ba7bcaae519746ad249a29  
  
ERROR: Unsupported distribution 'amzn'  
  
[root@ip-10-1-1-188 ~]# sudo yum install docker
```

- Docker --version

```
root@ip-10-1-1-188~  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
# Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
## Installing : containerd-1.4.6-2.amzn2.x86_64 [#####]  
### Installing : containerd-1.4.6-2.amzn2.x86_64 2/5  
Installing : libcgrouper-0.41-21.amzn2.x86_64 3/5  
Installing : pigz-2.3.4-1.amzn2.0.1.x86_64 4/5  
Verifying : docker-20.10.4-1.amzn2.x86_64 5/5  
Verifying : pigz-2.3.4-1.amzn2.0.1.x86_64 2/5  
Verifying : libcgrouper-0.41-21.amzn2.x86_64 3/5  
Verifying : containerd-1.4.6-2.amzn2.x86_64 4/5  
Verifying : runc-1.0.0-1.amzn2.x86_64 5/5  
  
Installed:  
docker.x86_64 0:20.10.4-1.amzn2  
  
Dependency Installed:  
containerd.x86_64 0:1.4.6-2.amzn2 libcgrouper.x86_64 0:0.41-21.amzn2 pigz.x86_64 0:2.3.4-1.amzn2.0.1 runc.x86_64 0:1.0.0-1.amzn2  
  
Complete!  
[root@ip-10-1-1-188 ~]# service start docker  
The service command supports only basic LSB actions (start, stop, restart, try-restart, reload, force-reload, status). For other actions, please try to use systemctl.  
[root@ip-10-1-1-188 ~]# docker --version  
Docker version 20.10.4, build d3cb39e  
[root@ip-10-1-1-188 ~]#
```

- service docker start

```
root@ip-10-1-1-188:~  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]#  
[root@ip-10-1-1-188 ~]# service docker start  
Redirecting to /bin/systemctl start docker.service  
[root@ip-10-1-1-188 ~]#
```

6:40 PM  
Tuesday  
8/17/2021

- service docker stop

[illegible]

- service docker status

```
root@ip-10-1-1-188:~#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]# service docker start
Redirecting to /bin/systemctl start docker.service
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]# service docker stop
Redirecting to /bin/systemctl stop docker.service
Warning: Stopping docker.service, but it can still be activated by:
        docker.socket
[root@ip-10-1-1-188 ~]# service docker stop
Redirecting to /bin/systemctl stop docker.service
Warning: Stopping docker.service, but it can still be activated by:
        docker.socket
[root@ip-10-1-1-188 ~]# service docker status
Redirecting to /bin/systemctl status docker.service
• docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; disabled; vendor preset: disabled)
   Active: inactive (dead) since Tue 2021-08-17 13:11:20 UTC; 41s ago
     Docs: https://docs.docker.com
   Process: 7637 ExecStartPre=/usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock $OPTIONS $DOCKER_STORAGE_OPTIONS $DOCKER_ADD_RUNTIMES (code=exited, status=0/SUCCESS)
   Process: 7633 ExecStartPre=/usr/libexec/docker/docker-setup-runtimes.sh (code=exited, status=0/SUCCESS)
   Process: 7623 ExecStartPre=/bin/mkdir -p /run/docker (code=exited, status=0/SUCCESS)
   Main PID: 7637 (code=exited, status=0/SUCCESS)

Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Starting Docker Application Container Engine"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="API listen on fd://"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Listening for connections on fd://"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Docker daemon"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal systemd[1]: Started Docker Application Container Engine.
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Docker daemon"
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:11:20.123Z" level=info msg="Docker daemon"
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:11:20.123Z" level=info msg="Docker daemon"
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal systemd[1]: Stopped Docker Application Container Engine.
Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-10-1-1-188 ~]#
```

- docker run hello-world

```
root@ip-10-1-1-188:~#
)
Main PID: 7637 (code=exited, status=0/SUCCESS)

Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Starting Docker Application Container Engine"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="API listen on fd://"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Listening for connections on fd://"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Docker daemon"
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal systemd[1]: Started Docker Application Container Engine.
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39.123Z" level=info msg="Docker daemon"
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:11:20.123Z" level=info msg="Docker daemon"
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:11:20.123Z" level=info msg="Docker daemon"
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal systemd[1]: Stopped Docker Application Container Engine.
Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-10-1-1-188 ~]# docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
b8dfde127a29: Pull complete
Digest: sha256:0fe689d7f6dbd9049c50b597ef1f85b7c1e8cc81f59c8d623fcb2250e8bec85b38
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/
[root@ip-10-1-1-188 ~]#
```

- docker run -it ubuntu bash

```
root@b422929d37b5: /
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39..."
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal systemd[1]: Started Docker Application ...
Aug 17 13:10:39 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:10:39..."
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal systemd[1]: Stopping Docker Application...
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:11:20..."
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal dockerd[7637]: time="2021-08-17T13:11:20..."
Aug 17 13:11:20 ip-10-1-1-188.ec2.internal systemd[1]: Stopped Docker Application ...
Hint: Some lines were ellipsized, use -l to show in full.
[root@ip-10-1-1-188 ~]# docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
b8dfdel27a29: Pull complete
Digest: sha256:0fe98d7debd9049c50b597ef1f85b7c1e8cc81f59c8d623fcb2250e8bec85b38
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

[root@ip-10-1-1-188 ~]# docker run -it ubuntu bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
1dc02c2132b1: Pull complete
Digest: sha256:82becede498898ec669628e7cb0ad87b6e1c371cb8a1e597d83a47fac21d6af3
Status: Downloaded newer image for ubuntu:latest
root@b422929d37b5:/#
```

- docker volume create

```
root@ip-10-1-1-188:~
Cgroup Version: 1
Plugins:
  Volume: local
  Network: bridge host ipvlan macvlan null overlay
  Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
Swarm: inactive
Runtimes: io.containerd.runtime.v1.linux runc io.containerd.runc.v2
Default Runtime: runc
Init Binary: docker-init
containerd version: d71fcd7d8303cbrf684402823e425e9dd2e99285d
runc version: 8runc commit
init version: de40ad0
Security Options:
  seccomp
   Profile: default
Kernel Version: 4.14.238-182.422.amzn2.x86_64
Operating System: Amazon Linux 2
OSType: linux
Architecture: x86_64
CPUs: 1
Total Memory: 983.3MiB
Name: ip-10-1-1-188.ec2.internal
ID: EG3I:C6OG:VOC7:U4QW:C444:OJFJ:ZK3N:IO65:CLBE:SOIM:FXHV:ZG22
Docker Root Dir: /var/lib/docker
Debug Mode: false
Registry: https://index.docker.io/v1/
Labels:
Experimental: false
Insecure Registries:
  127.0.0.0/8
Live Restore Enabled: false

[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]# dockr volume craete
-bash: dockr: command not found
[root@ip-10-1-1-188 ~]# dockr volume create
-bash: dockr: command not found
[root@ip-10-1-1-188 ~]# docker volume create
bf90aa64f987605e9b75136ae9557563860d17d9fec0d99d7ba61cda760c3267
[root@ip-10-1-1-188 ~]#
```

- docker volume inspect

```
root@ip-10-1-1-188-~
init version: de40ad0
Security Options:
  seccomp
    Profile: default
Kernel Version: 4.14.238-182.422.amzn2.x86_64
Operating System: Amazon Linux 2
OSType: linux
Architecture: x86_64
CPUs: 1
Total Memory: 983.3MiB
Name: ip-10-1-1-188.ec2.internal
ID: EG3I:C6OG:VOC7:U4QW:C444:ONPJ:ZK3N:IO65:CLBE:SONM:FXHV:2G22
Docker Root Dir: /var/lib/docker
Debug Mode: false
Registry: https://index.docker.io/v1/
Labels:
Experimental: false
Insecure Registries:
  127.0.0.0/8
Live Restore Enabled: false

[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]#
[root@ip-10-1-1-188 ~]# dockr volume create
-bash: dockr: command not found
[root@ip-10-1-1-188 ~]# dockr volume create
-bash: dockr: command not found
[root@ip-10-1-1-188 ~]# docker volume create
bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267
[root@ip-10-1-1-188 ~]# docker volume inspect bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267
[
  {
    "CreatedAt": "2021-08-17T13:38:28Z",
    "Driver": "local",
    "Labels": {},
    "Mountpoint": "/var/lib/docker/volumes/bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267/_data",
    "Name": "bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267",
    "Options": {},
    "Scope": "local"
  }
]
```

- docker volume rm valid

```
root@ip-10-1-1-188-~
[root@ip-10-1-1-188 ~]# docker volume ls
DRIVER      VOLUME NAME
local       bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267
local       e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac
[root@ip-10-1-1-188 ~]# docker volume rm bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267
bf90aa64f987605e9b75136a69557563860d17d9fec0d99d7ba61cda760c3267
[root@ip-10-1-1-188 ~]# docker volume ls
docker: 'volumes' is not a docker command.
See 'docker --help'
[root@ip-10-1-1-188 ~]# docker volume ls
DRIVER      VOLUME NAME
local       e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac
[root@ip-10-1-1-188 ~]# docker voume valid
docker: 'volumes' is not a docker command.
See 'docker --help'
[root@ip-10-1-1-188 ~]# docker volume valid

Usage: docker volume COMMAND

Manage volumes

Commands:
  create      Create a volume
  inspect     Display detailed information on one or more volumes
  ls          List volumes
  prune       Remove all unused local volumes
  rm          Remove one or more volumes

Run 'docker volume COMMAND --help' for more information on a command.
[root@ip-10-1-1-188 ~]#
```

- docker docker ls

```
root@ip-10-1-1-188:~  
[root@ip-10-1-1-188 ~]# docker volume ls  
DRIVER          VOLUME NAME  
local          bf90aa64f987605e9b75136a69557563860d17d9fec0d95d7ba61cda760c3267  
local          e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac  
[root@ip-10-1-1-188 ~]# docker volume rm bf90aa64f987605e9b75136a69557563860d17d9fec0d95d7ba61cda760c3267  
bf90aa64f987605e9b75136a69557563860d17d9fec0d95d7ba61cda760c3267  
[root@ip-10-1-1-188 ~]# docker volume ls  
docker: 'volumes' is not a docker command.  
See 'docker --help'  
[root@ip-10-1-1-188 ~]# docker volume ls  
DRIVER          VOLUME NAME  
local          e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac  
[root@ip-10-1-1-188 ~]# docker volume valid  
docker: 'volume' is not a docker command.  
See 'docker --help'  
[root@ip-10-1-1-188 ~]# docker volume valid  
Usage:  docker volume COMMAND  
  
Manage volumes  
  
Commands:  
  create      Create a volume  
  inspect     Display detailed information on one or more volumes  
  ls          List volumes  
  prune       Remove all unused local volumes  
  rm          Remove one or more volumes  
  
Run 'docker volume COMMAND --help' for more information on a command.  
[root@ip-10-1-1-188 ~]# docker volume ls  
DRIVER          VOLUME NAME  
local          e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac  
[root@ip-10-1-1-188 ~]#
```

- service docker stop

```
root@ip-10-1-1-188:~  
[root@ip-10-1-1-188 ~]# docker volume ls  
DRIVER          VOLUME NAME  
local          bf90aa64f987605e9b75136a69557563860d17d9fec0d95d7ba61cda760c3267  
local          e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac  
[root@ip-10-1-1-188 ~]# docker volume rm bf90aa64f987605e9b75136a69557563860d17d9fec0d95d7ba61cda760c3267  
bf90aa64f987605e9b75136a69557563860d17d9fec0d95d7ba61cda760c3267  
[root@ip-10-1-1-188 ~]# docker volume ls  
docker: 'volumes' is not a docker command.  
See 'docker --help'  
[root@ip-10-1-1-188 ~]# docker volume ls  
DRIVER          VOLUME NAME  
local          e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac  
[root@ip-10-1-1-188 ~]# docker volume valid  
docker: 'volume' is not a docker command.  
See 'docker --help'  
[root@ip-10-1-1-188 ~]# docker volume valid  
Usage:  docker volume COMMAND  
  
Manage volumes  
  
Commands:  
  create      Create a volume  
  inspect     Display detailed information on one or more volumes  
  ls          List volumes  
  prune       Remove all unused local volumes  
  rm          Remove one or more volumes  
  
Run 'docker volume COMMAND --help' for more information on a command.  
[root@ip-10-1-1-188 ~]# docker volume ls  
DRIVER          VOLUME NAME  
local          e96274355cc569a59257c2691be0bd2c9523f0d2eda97668eca4fef0073a9ac  
[root@ip-10-1-1-188 ~]# service docker stop  
Redirecting to /bin/systemctl stop docker.service  
Warning: Stopping docker.service, but it can still be activated by:  
  docker.socket  
[root@ip-10-1-1-188 ~]#
```