

Docker Task

Creating EC2 Instance:

The screenshot displays the AWS Management Console interface for EC2 instances. The main content area shows a list of instances under the heading "Instances (1)". A search bar and a "Clear filters" button are present. The instance list table includes columns for Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, and Public IP. One instance, "Dockerec2", is listed with ID "i-01eacbaac809b08fd" and is in a "Running" state. Below the table, there is a section titled "Select an instance". The left sidebar contains navigation links for various AWS services and EC2-specific features. At the bottom, a terminal window shows a successful SSH connection to the instance, displaying the Amazon Linux 2023 logo and system information.

Installing Docker:

```
ec2-user@ip-172-31-82-65:~$ ssh -i "linuxkey.pem" ec2-user@ec2-3-83-96-208.compute-1.amazonaws.com
C:\Users\surek\Downloads> ssh -i "linuxkey.pem" ec2-user@ec2-3-83-96-208.compute-1.amazonaws.com

#####
#               Amazon Linux 2023
#               https://aws.amazon.com/linux/amazon-linux-2023
#               V- - - - ->
#               /m/

Last login: Sat Feb 22 07:58:09 2025 from 49.37.194.199
[ec2-user@ip-172-31-82-65 ~]$ sudo yum update -y
Last metadata expiration check: 0:12:47 ago on Sat Feb 22 07:59:15 2025.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-82-65 ~]$ sudo yum install docker -y
Last metadata expiration check: 0:14:04 ago on Sat Feb 22 07:59:15 2025.
Package docker-25.0.8-1.amzn2023.0.1.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-82-65 ~]$ |
```

Starting Docker Service:

```
PS C:\Users\surek\Downloads> ssh -i "linuxkey.pem" ec2-user@ec2-3-83-96-208.compute-1.amazonaws.com  
#  
#####  
      \#####\  
      /#####\  
      |#####|  
      \###/  
      \|##/  
      V--'--->  
      /m/'  
Last login: Sat Feb 22 07:58:09 2025 from 49.37.194.199  
[ec2-user@ip-172-31-82-65 ~]$ sudo yum update -y  
Last metadata expiration check: 0:12:47 ago on Sat Feb 22 07:59:15 2025.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[ec2-user@ip-172-31-82-65 ~]$ sudo yum install docker -y  
Last metadata expiration check: 0:14:04 ago on Sat Feb 22 07:59:15 2025.  
Package docker-25.0.8-1.amzn2023.0.1.x86_64 is already installed.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[ec2-user@ip-172-31-82-65 ~]$ sudo systemctl enable docker  
[ec2-user@ip-172-31-82-65 ~]$ sudo systemctl start docker  
[ec2-user@ip-172-31-82-65 ~]$
```

Docker Images:

```
ec2-user@ip-172-31-82-65:~$ docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
python        latest    7398721493a3   2 weeks ago   1.02GB
[ec2-user@ip-172-31-82-65 ~]$
```

Docker Containers:

```
ec2-user@ip-172-31-82-65:~$ docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS          PORTS          NAMES
f1280ba86afc   python    "python3"               14 minutes ago Exited (0) 14 minutes ago          docker
[ec2-user@ip-172-31-82-65 ~]$ sudo docker rm f1280ba86afc
f1280ba86afc
[ec2-user@ip-172-31-82-65 ~]$ sudo docker run -p80:80 --name docker -d -it python
37e356c1f71be29897c83d37c6b880dd0e6adb48f8699d9e22cf2855a348312948
[ec2-user@ip-172-31-82-65 ~]$ sudo docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS          PORTS          NAMES
37e356c1f71b   python    "python3"               15 seconds ago Up 14 seconds   0.0.0.0:80->80/tcp, :::80->80/tcp  docker
[ec2-user@ip-172-31-82-65 ~]$
```

```
ec2-user@ip-172-31-82-65:~$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED      STATUS      PORTS      NAMES
f1280ba86afc   python   "python3"               14 minutes ago    Exited (0) 14 minutes ago          docker
[ec2-user@ip-172-31-82-65 ~]$ sudo docker rm f1280ba86afc
f1280ba86afc
[ec2-user@ip-172-31-82-65 ~]$ sudo docker run -p80:80 --name docker -d -it python
37e356c1f71be29897c83d37c6b80dd0cadb48f8699d9e22cf2855a348312948
[ec2-user@ip-172-31-82-65 ~]$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED      STATUS      PORTS      NAMES
37e356c1f71b   python   "python3"               15 seconds ago    Up 14 seconds    0.0.0.0:80->80/tcp, :::80->80/tcp    docker
[ec2-user@ip-172-31-82-65 ~]$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED      STATUS      PORTS      NAMES
37e356c1f71b   python   "python3"               About a minute ago    Up 59 seconds    0.0.0.0:80->80/tcp, :::80->80/tcp    docker
[ec2-user@ip-172-31-82-65 ~]$ |
```

Creating volume:

```
ec2-user@ip-172-31-82-65:~$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED      STATUS      PORTS      NAMES
f1280ba86afc   python   "python3"               14 minutes ago    Exited (0) 14 minutes ago          docker
[ec2-user@ip-172-31-82-65 ~]$ sudo docker rm f1280ba86afc
f1280ba86afc
[ec2-user@ip-172-31-82-65 ~]$ sudo docker run -p80:80 --name docker -d -it python
37e356c1f71be29897c83d37c6b80dd0cadb48f8699d9e22cf2855a348312948
[ec2-user@ip-172-31-82-65 ~]$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED      STATUS      PORTS      NAMES
37e356c1f71b   python   "python3"               15 seconds ago    Up 14 seconds    0.0.0.0:80->80/tcp, :::80->80/tcp    docker
[ec2-user@ip-172-31-82-65 ~]$ docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED      STATUS      PORTS      NAMES
37e356c1f71b   python   "python3"               About a minute ago    Up 59 seconds    0.0.0.0:80->80/tcp, :::80->80/tcp    docker
[ec2-user@ip-172-31-82-65 ~]$ docker volume ls
DRIVER        VOLUME NAME
[ec2-user@ip-172-31-82-65 ~]$ docker volume create doc1
doc1
[ec2-user@ip-172-31-82-65 ~]$ docker volume ls
DRIVER        VOLUME NAME
local        doc1
[ec2-user@ip-172-31-82-65 ~]$ |
```

Creating Docker Network:

```
ec2-user@ip-172-31-82-65:~$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
f1280ba86afc   python        "python3"               14 minutes ago Exited (0)    14 minutes ago          docker
[ec2-user@ip-172-31-82-65 ~]$ sudo docker rm f1280ba86afc
f1280ba86afc
[ec2-user@ip-172-31-82-65 ~]$ sudo docker run -p80:80 --name docker -d -it python
37e356c1f71be29897c83d37c6b80dd0cadb48f8699d9e22cf2855a348312948
[ec2-user@ip-172-31-82-65 ~]$ sudo docker ps
CONTAINER ID   IMAGE          COMMAND                  STATUS        PORTS          NAMES
37e356c1f71b   python        "python3"               Up 14 seconds  0.0.0.0:80->80/tcp, :::80->80/tcp  docker
[ec2-user@ip-172-31-82-65 ~]$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  STATUS        PORTS          NAMES
37e356c1f71b   python        "python3"               About a minute ago Up 59 seconds  0.0.0.0:80->80/tcp, :::80->80/tcp  docker
[ec2-user@ip-172-31-82-65 ~]$ docker volume ls
DRIVER          VOLUME NAME
[ec2-user@ip-172-31-82-65 ~]$ docker volume create doc1
doc1
[ec2-user@ip-172-31-82-65 ~]$ docker volume ls
DRIVER          VOLUME NAME
local          doc1
[ec2-user@ip-172-31-82-65 ~]$ docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
c8819121039f   bridge   bridge    local
e4e54f2cea17   host     host      local
66af4080149b   none     null       local
[ec2-user@ip-172-31-82-65 ~]$ docker network create doc1
6c191789f9cc19ce9ffcc383ecd74edae4740e3acc0d50460524c1d8388efb7c
[ec2-user@ip-172-31-82-65 ~]$ docker networks ls
docker: 'networks' is not a docker command.
See 'docker --help'
[ec2-user@ip-172-31-82-65 ~]$ docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
c8819121039f   bridge   bridge    local
6c191789f9cc   doc1     bridge    local
e4e54f2cea17   host     host      local
66af4080149b   none     null       local
[ec2-user@ip-172-31-82-65 ~]$
```