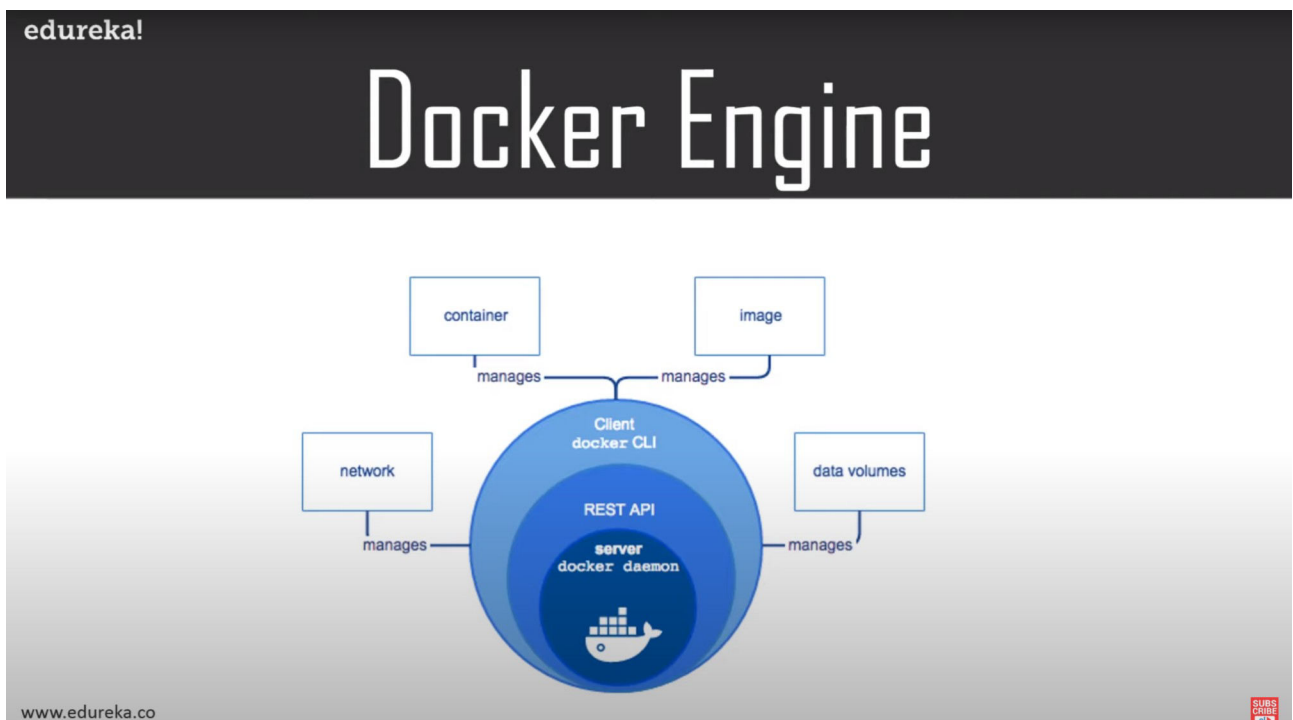


# Docker Daemon

This is a background process that listens to client calls through the REST API and manages Docker images, containers and storage.

The connection between the daemon and the client is done using Unix sockets.

The Docker daemon is responsible for building, running or distributing Docker containers.



Open your Docker Daemon to the World

The problem statement: We give access to our docker server for other system

Is Docker daemon can be connected to the world using combination of TCP and 2375 (a default port used by Docker daemon for connection with client). This allows a remote user to connect with docker daemon and can access the containers/images on the system

First stop docker before making these changes

```
sankethsk@sankethsk:/usr/bin$ sudo systemctl stop docker
[sudo] password for sankethsk:
Warning: Stopping docker.service, but it can still be activated by:
        docker.socket
sankethsk@sankethsk:/usr/bin$
```

Docker daemon can be connected to the world using combination of TCP and 2375(a default port used by Docker daemon for connection with client).This allows a remote user to connect with docker daemon and can access the containers/images on the system.

daemon.json

```
{"hosts": ["tcp://0.0.0.0:2375", "unix:///var/run/docker.sock"]}
```

"tcp://0.0.0.0:2375" indicates that the Docker daemon should listen on all available network interfaces (0.0.0.0) on TCP port 2375. This makes the Docker daemon accessible from any IP address on the host system over TCP.

```
"unix:///var/run/docker.sock"
```

By configuring the Unix domain socket endpoint the Docker client running on the same host can communicate with the Docker daemon without using the network. This is the default and secure way to interact with the Docker daemon on the local machine.

```
sankethsk@sankethsk:~$ cd /etc/docker/  
sankethsk@sankethsk:/etc/docker$ ls  
daemon.json
```

```
GNU nano 6.2 daemon.json  
{"hosts":["tcp://0.0.0.0:2375","unix:///var/run/docker.sock"]}
```

override.conf

```
[Service]  
ExecStart  
ExecStart=/usr/bin/dockerd
```

execstart is a config option used in systemd service unit files.It specifies the command and args that are executed when starting a service using systemd in this case its daemon.

Here We are overriding the default execstart for docker service.Its a command for docker service used to ensure docker daemon is started with specified options in daemon.json file.

This activates when we use `sudo systemctl start docker` suggesting it to refer to this file:/usr/bin/dockerd

```
sankethsk@sankethsk:/etc/docker$ ls
daemon.json
sankethsk@sankethsk:/etc/docker$ cd /etc/systemd/system/docker.service.d/
sankethsk@sankethsk:/etc/systemd/system/docker.service.d$ sudo nano override.conf
sankethsk@sankethsk:/etc/systemd/system/docker.service.d$
```

```
GNU nano 6.2                override.conf
[Service]
ExecStart=
ExecStart=/usr/bin/dockerd
```

After this we restart sysetemd daemon:

sudo systemctl daemon-reload

and restart docker:systemctl restart docker service

```
sankethsk@sankethsk:~$ sudo systemctl daemon-reload
sankethsk@sankethsk:~$ sudo systemctl restart docker
sankethsk@sankethsk:~$
sankethsk@sankethsk:~$
sankethsk@sankethsk:~$
```

Now the Docker system on this sysetm is ready for communication with other systems

Open browser and run

<http://localhost:2375/images/json>

This will show all the images under the current local system

You can access these contents through other devices using your ip address:port number in browser.

