

# Messing up with Container

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Date: 03-Aug-21

# Agenda

Docker run

Override default commands

Listing running containers

Container lifecycle

Restarting a stopped container

Removing a stopped container

Retrieving log output

Stopping a container

Multi-command container

Executing command in running container

Purpose of “-it” flag

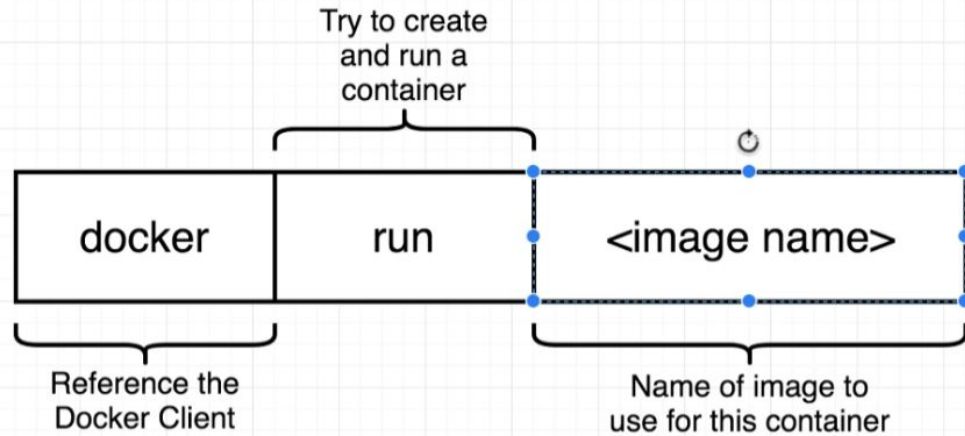
Getting a command prompt in a container

Starting with a shell

Container isolation

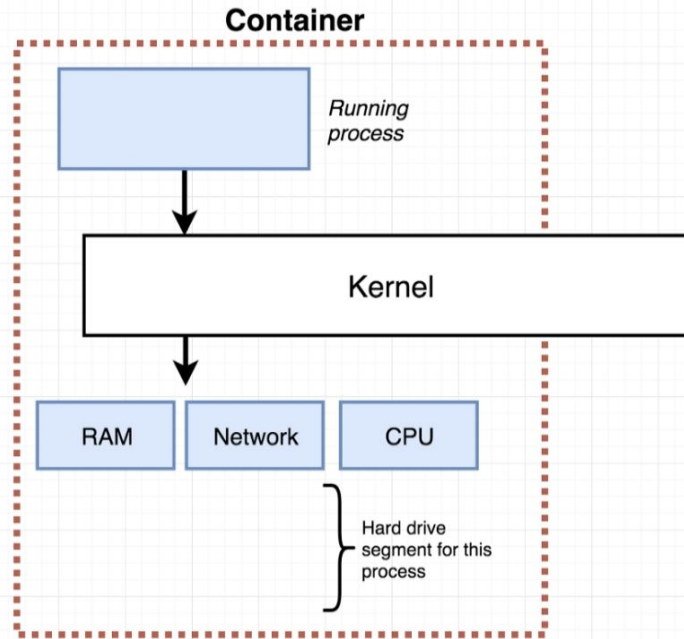
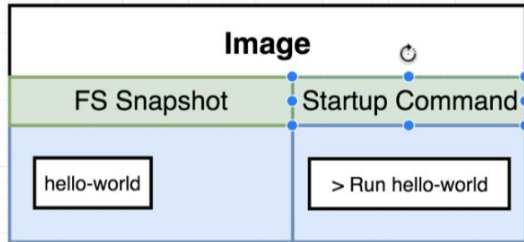
# Docker run

Creating and Running a Container from an Image



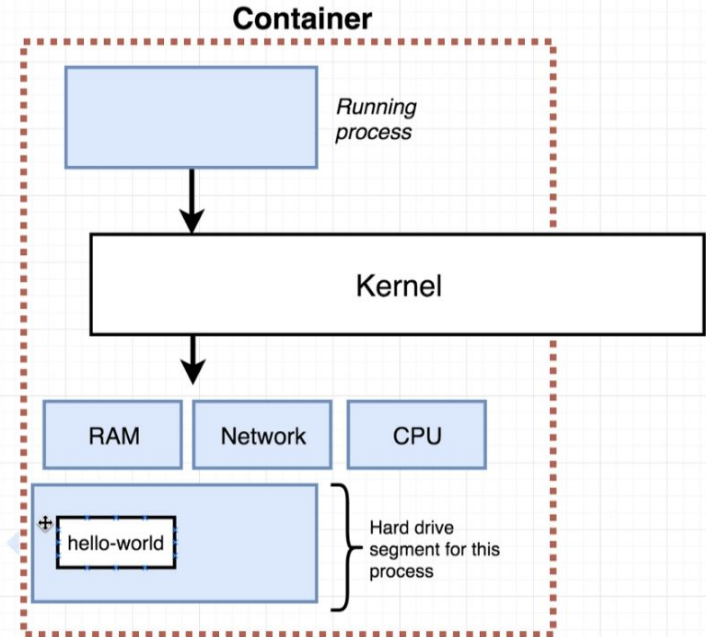
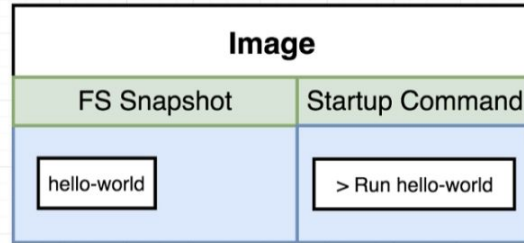
# Docker run

> docker run hello-world



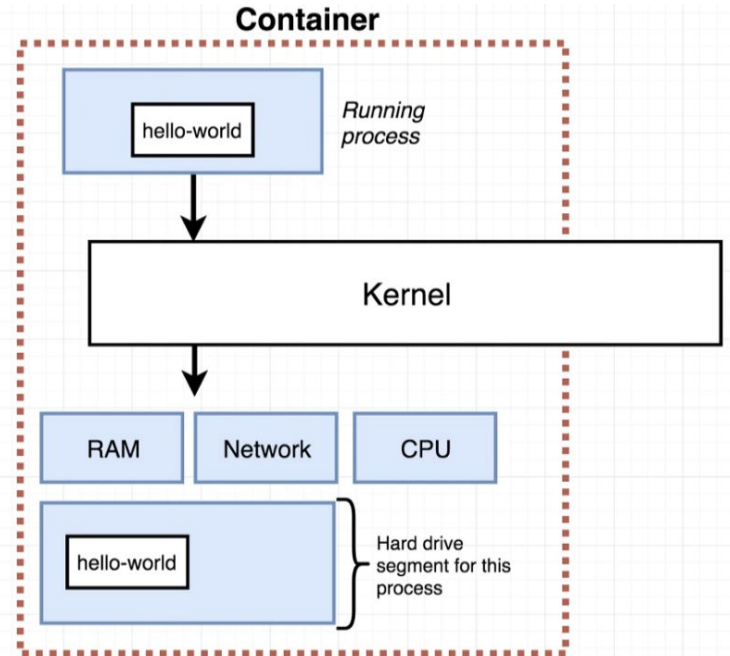
# Docker run

> docker run hello-world



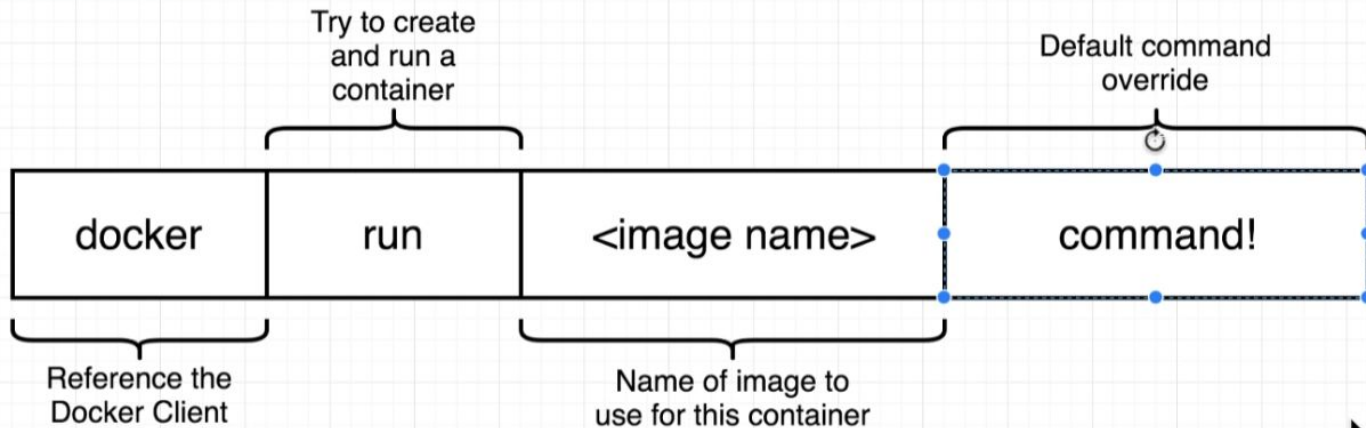
# Docker run

> docker run hello-world



# Override default commands

## Creating and Running a Container from an Image

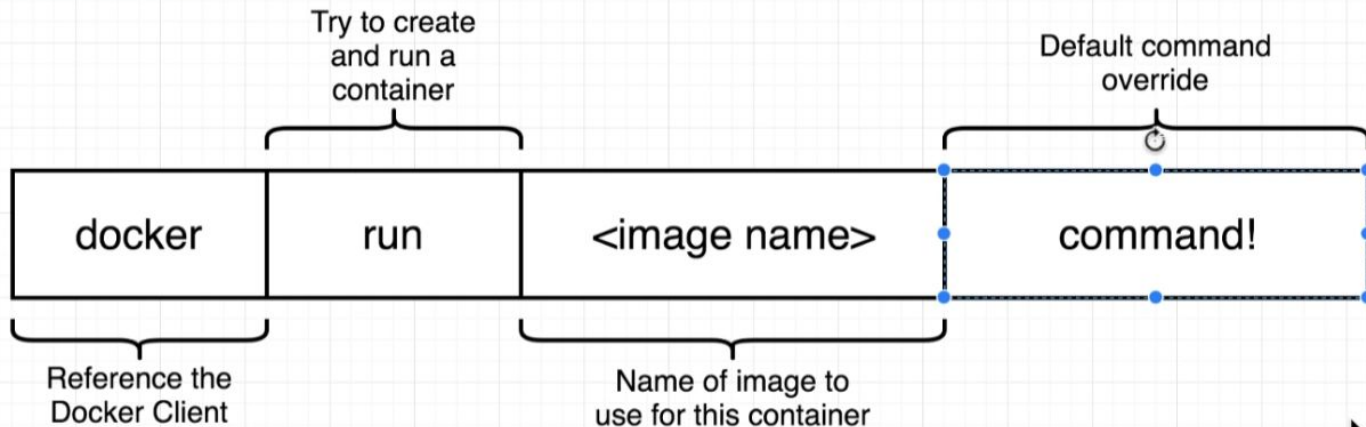


> `docker run busybox echo there`

> `docker run busybox ls`

# Override default commands

## Creating and Running a Container from an Image

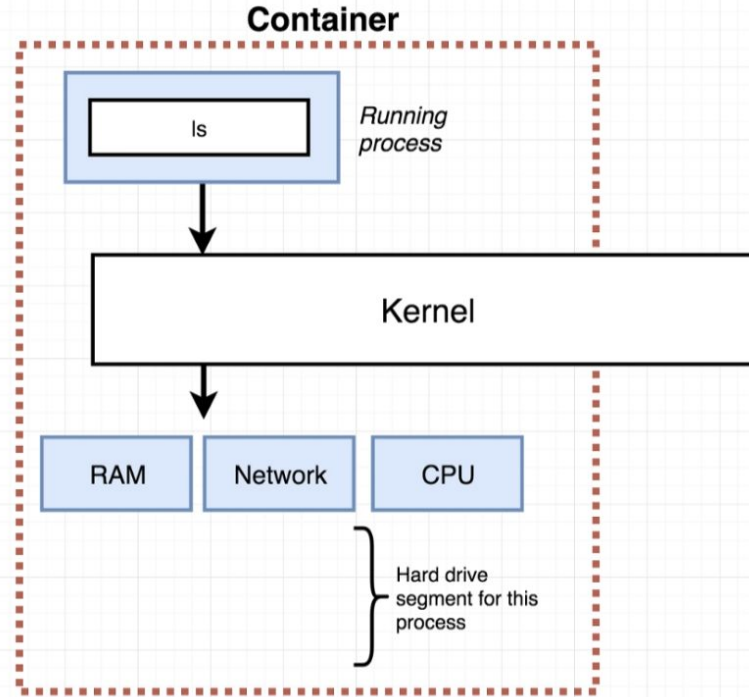
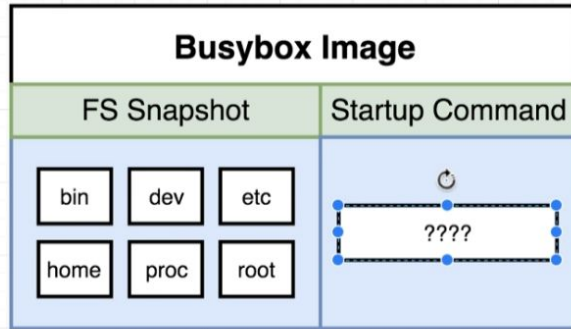


> `docker run busybox echo there`

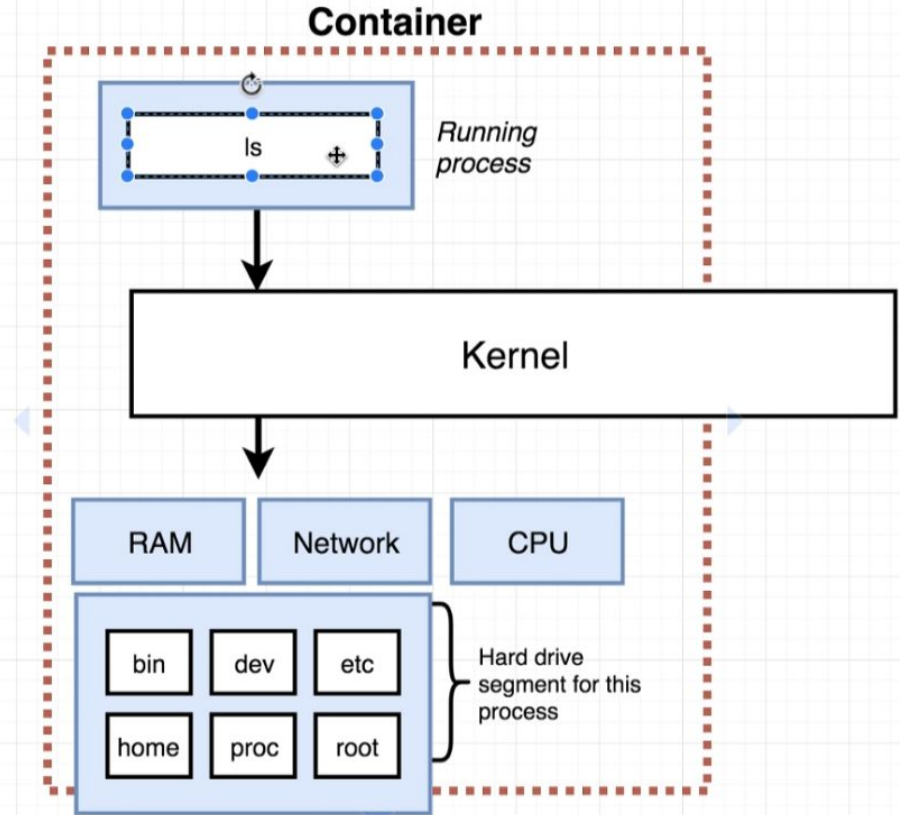
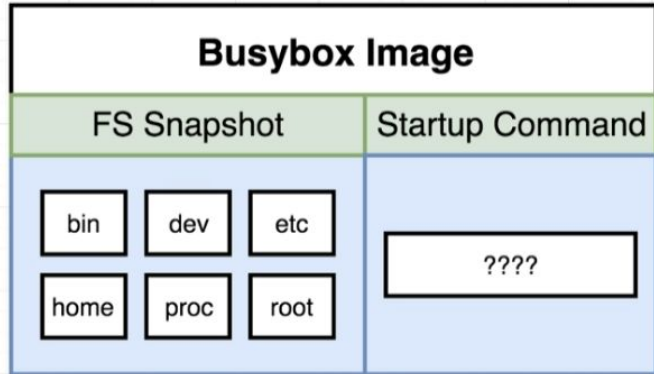
> `docker run busybox ls`



# Override default commands

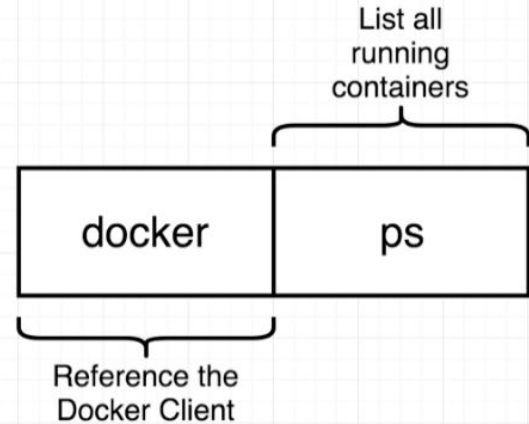


# Override default commands



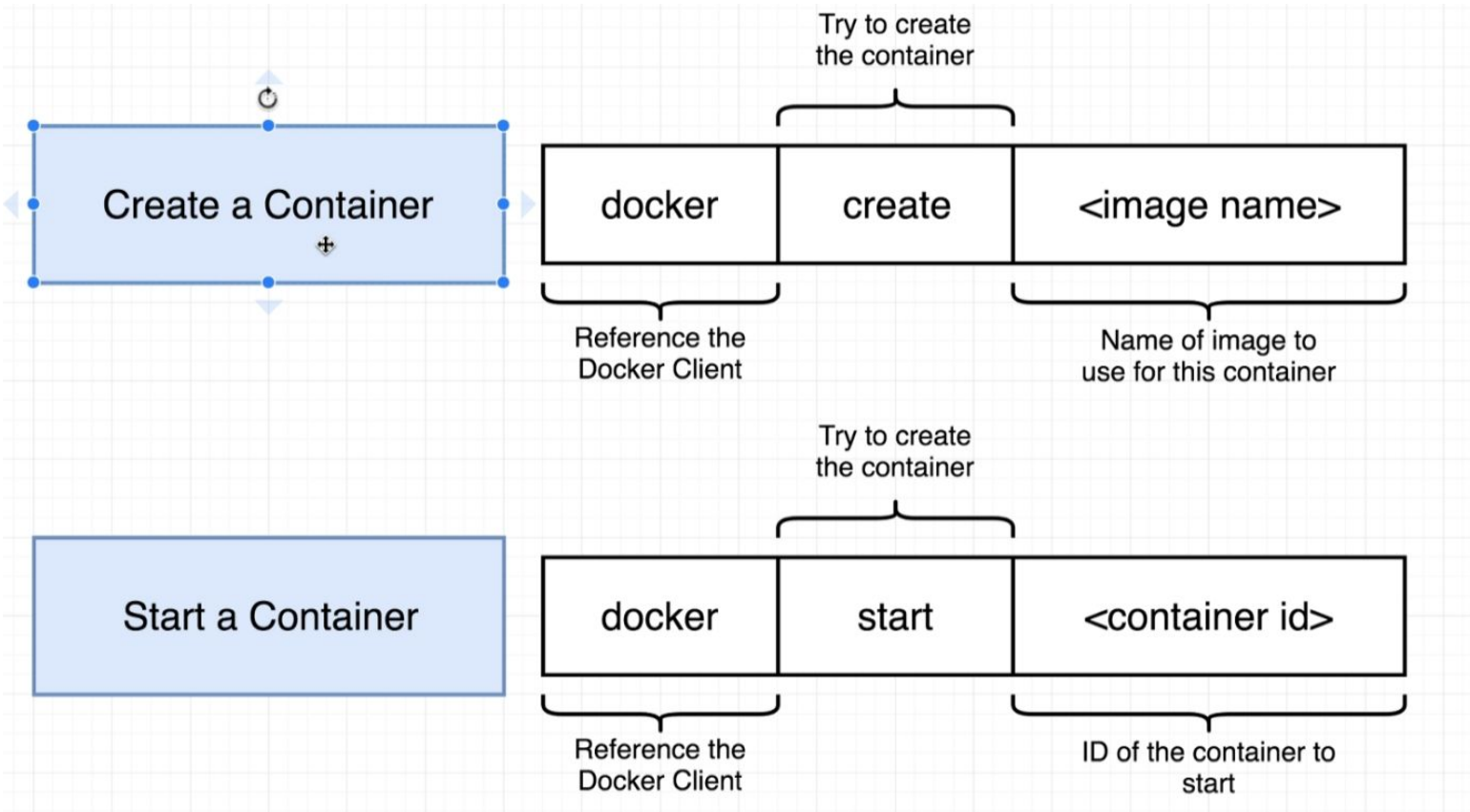
### 3. Listing running container

List all running containers



- > `docker run busybox ping google.com`
- > `docker ps`
- > `docker ps -a`

# Containers Lifecycle



## Restarting a stopped container

```
> docker run busybox echo hi there  
> docker ps -a
```

```
# To restart  
> docker start -a container-id
```

# Can't override the default behavior of a container

```
> docker run busybox echo hi there  
> docker ps -a  
> docker start -a container-id echo hi there
```

## Removing a stopped container

```
> docker ps -a
```

```
# To remove
```

```
> docker system prune
```

WARNING! This will remove:

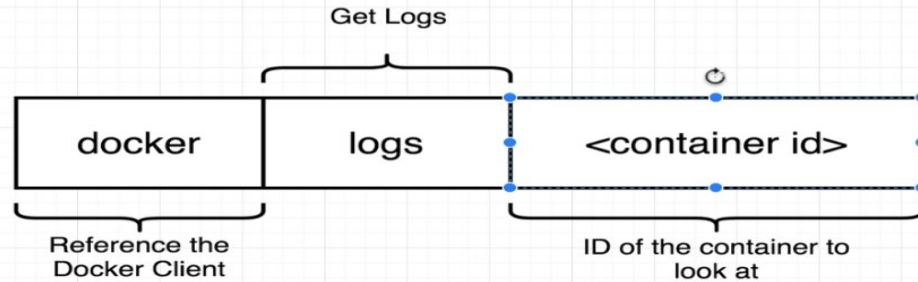
- all stopped containers
- all networks not used by at least one container
- all dangling images
- **all dangling build cache**

Are you sure you want to continue? [y/N]

# Retrieving logs output

- > docker create busybox echo hi there
- > docker start container-id

Get logs from a container



# Stopping a container

- > docker create busybox ping google.com
- > docker start container-id
- > docker logs container-id
- > docker ps

Stop a Container

docker

stop

<container id>

Kill a Container

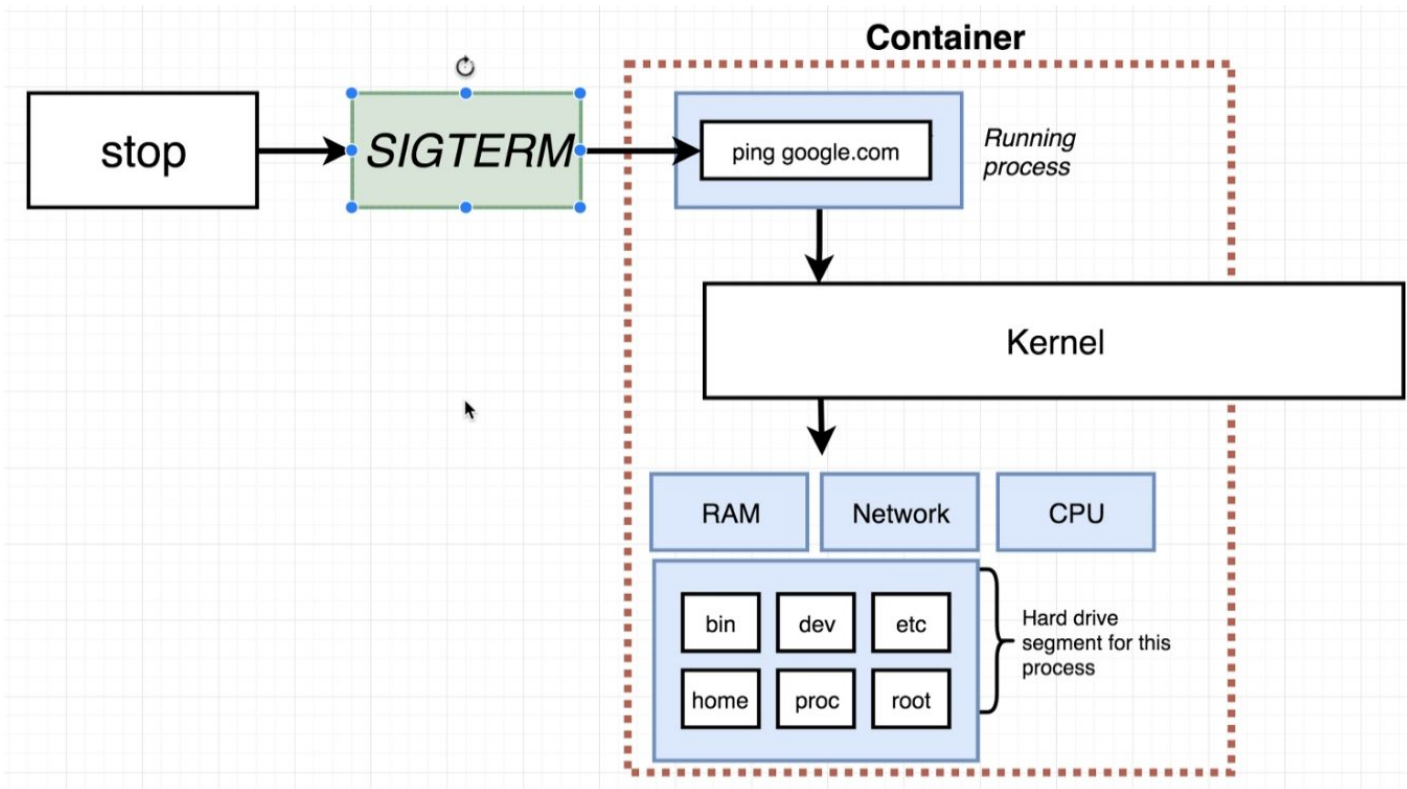
docker

kill

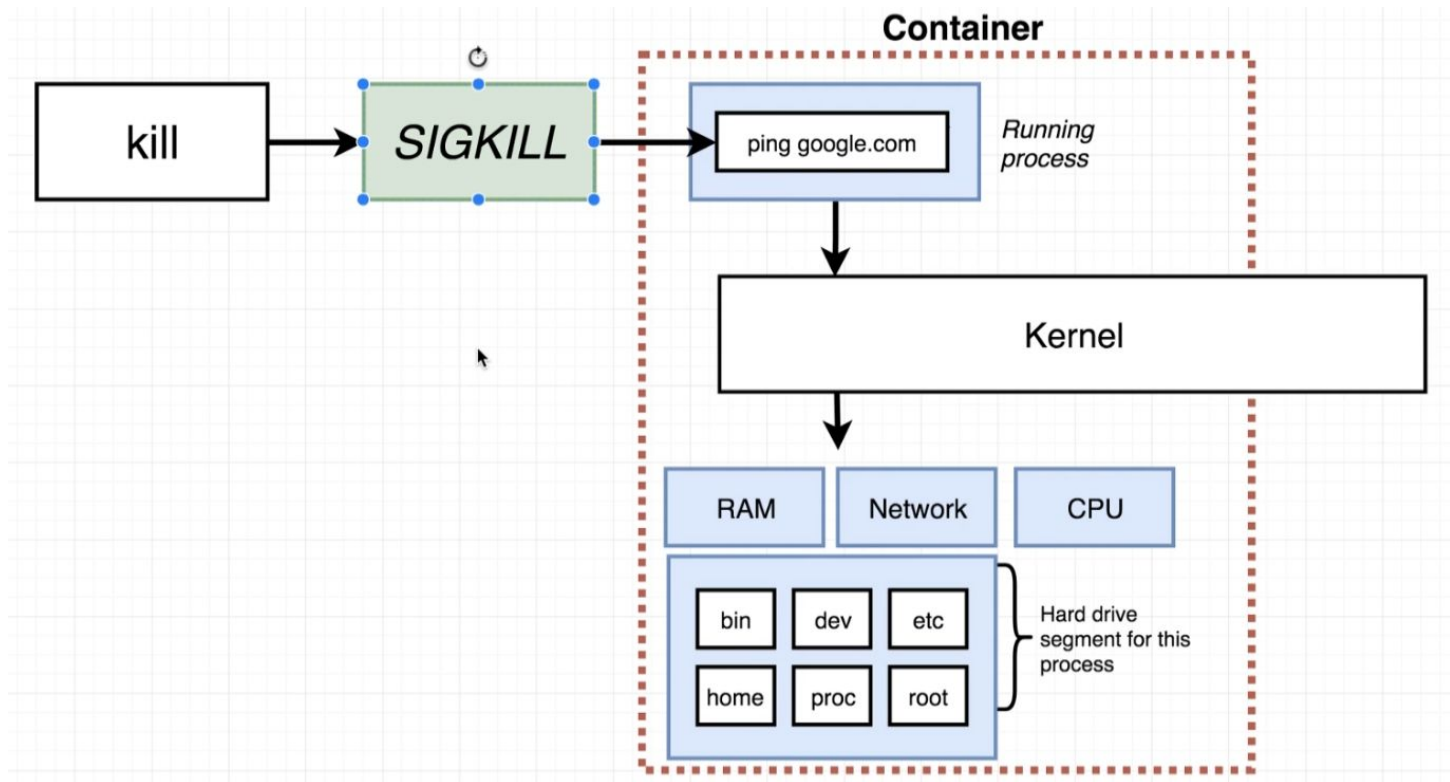
<container id>



## Stopping a container



## Stopping a container

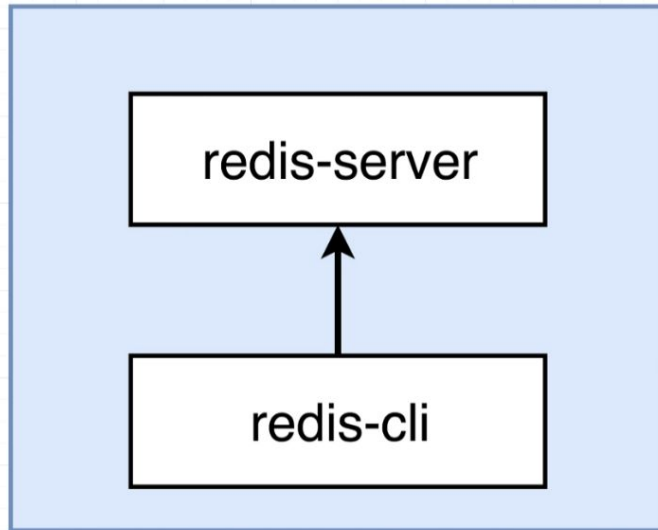


# Multi-command container

> docker run redis

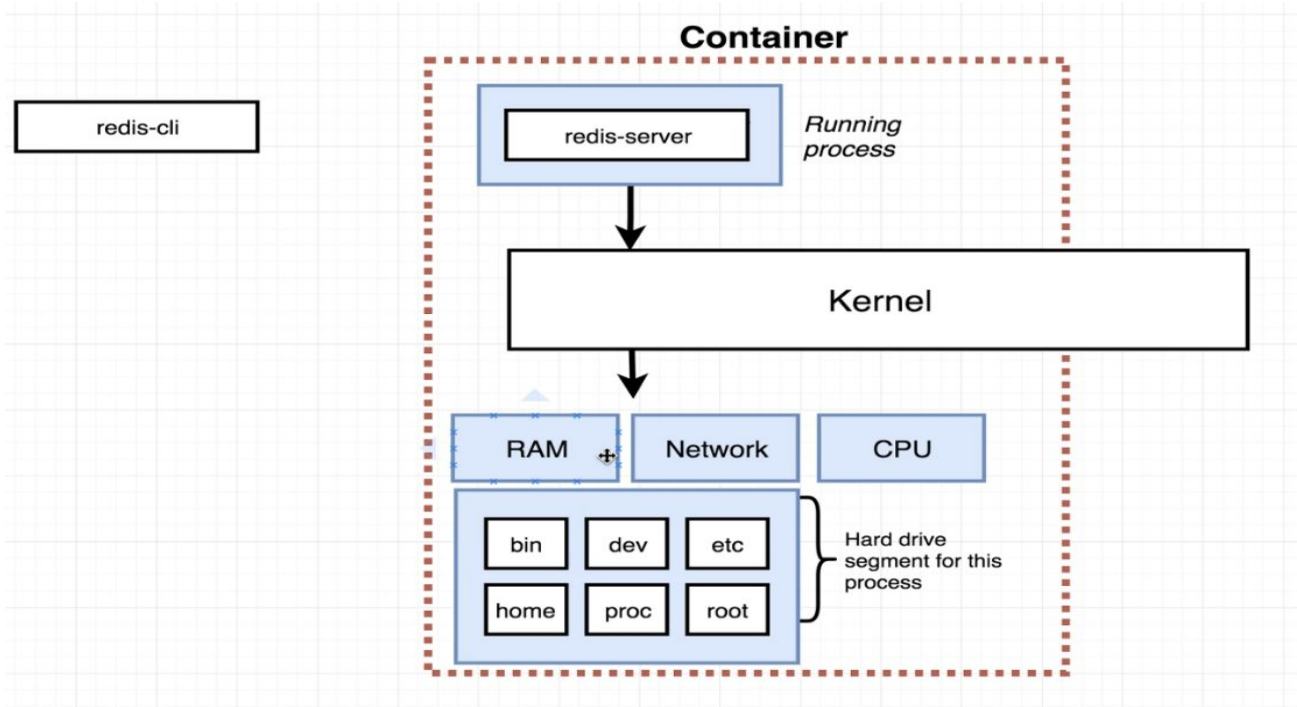
# to interact with redis

> redis-cli



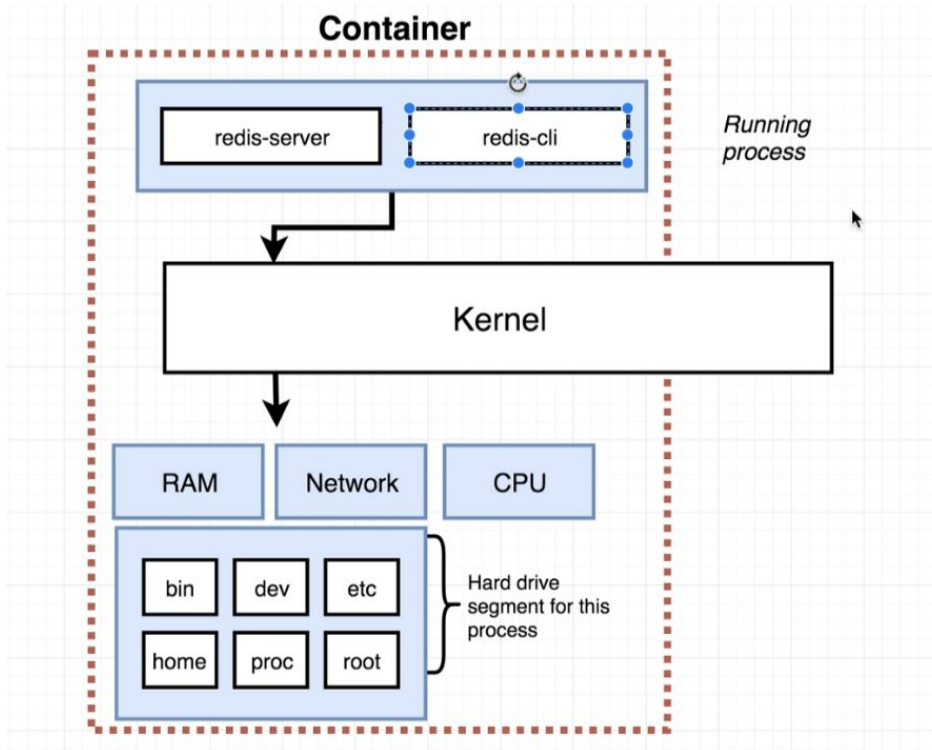
# Multi-command container

> docker run redis



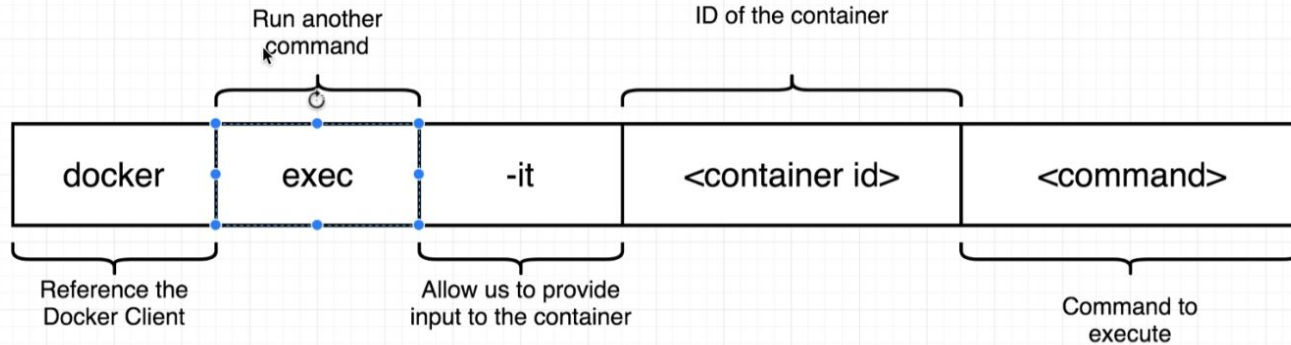
# Multi-command container

> docker run redis



# Executing command in running container

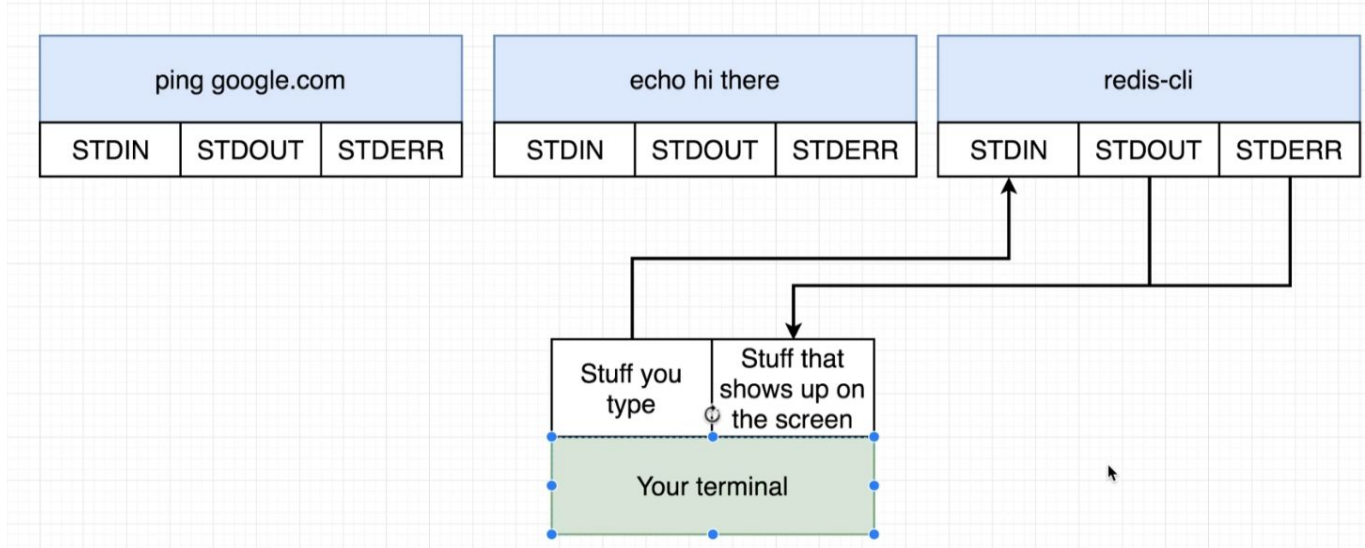
Execute an additional command in a container



> `docker ps # get container-id`

> `docker exec -it container-id redis-cli`

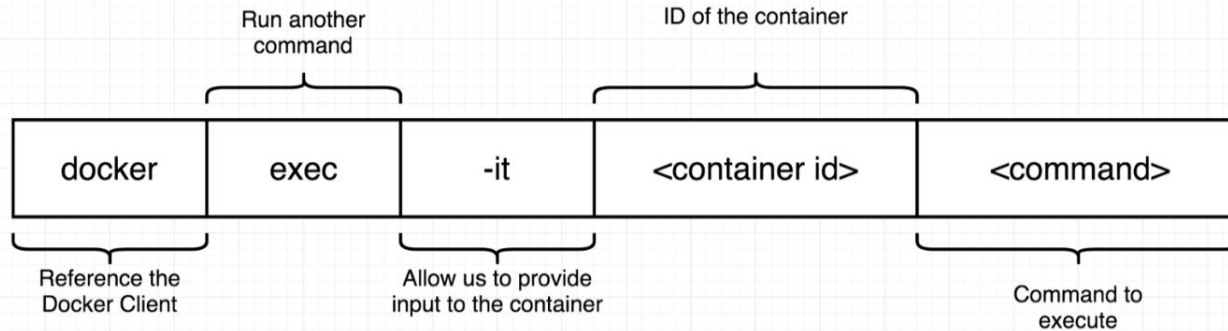
## Purpose of “-it” flag



```
> docker exec -it container-id redis-cli
```

# Getting a command prompt in a container

Execute an additional command in a container

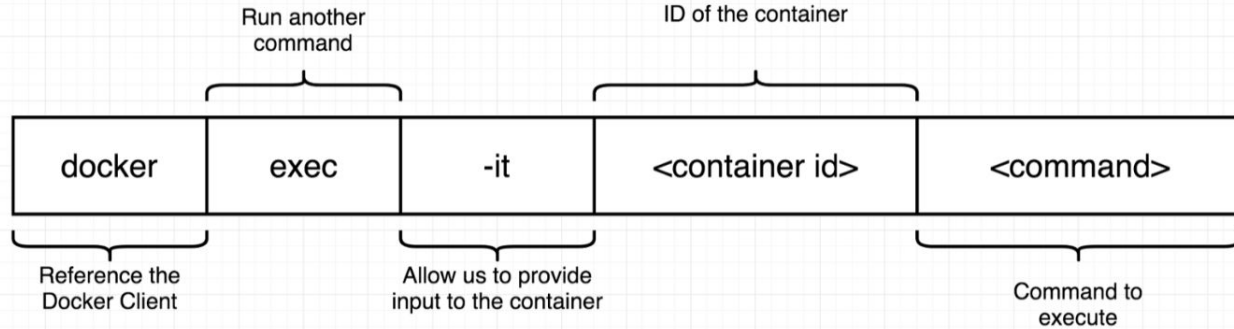


```
> docker ps # grab container id
> docker exec -it container-id sh
> cd /
> ls
> echo hi there
> redis-cli
```



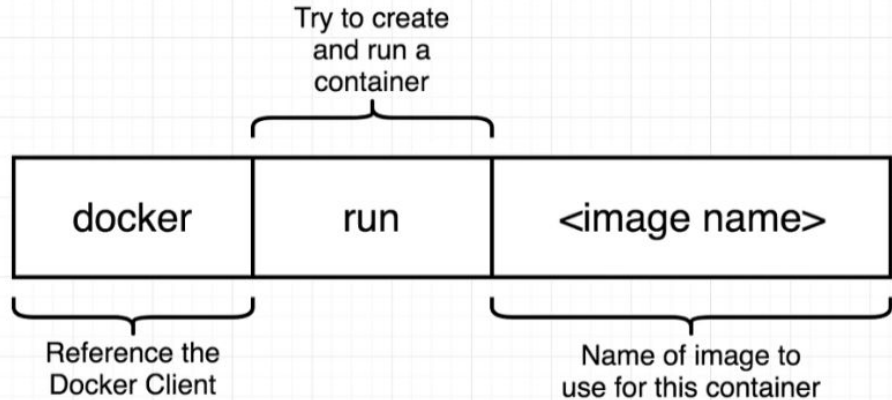
## Starting with a shell

Execute an additional command in a container



## Starting with a shell

### Creating and Running a Container from an Image



```
> docker run -it busybox sh
/ # ls
/ # echo hi there
```

## Container isolation

```
> docker run -it busybox sh  
> ls
```

# Another terminal

```
> docker run -it busybox sh  
> touch hithere  
> ls
```

```
> docker ps
```