

# Docker Containers Essentials

## Basic Command line- Pulling and running a container

```
Docker pull <image_name>
```

- Retrieves an image (layered Image) from a remote **repository**. Images are composed of layers
- Layers are applied to create the container's filesystem

```
Docker run <image_name>
```

- Pulls image from Default or custom Repo (if not already pulled)
- Executes a process in a new layer on top of image
- Layer is Copy-On-Write (COW)

# Docker Containers Essentials

## Basic Command line- Running a Container

```
Docker run <image_name> [Options]
```

**Foreground blocking [No Option]**

**Foreground interactive:**

- [ **-i** ] Keep STDIN open even if not attached
- [ **-t** ] Allocate a pseudo-tty

**Background Options (detached)**

- [ **-d** ] Run container in background and print container ID

```
Docker ps [Options]
```

**No Option: only Active Containers**

[ **-a** ] All Containers even the paused or exited state