



# 50 Docker Commands For Container Management, Image Manipulation, Networking & More

## Container Management:

### 1. Run a Container:

```
docker run [OPTIONS] IMAGE[:TAG] [COMMAND] [ARG...]
```

### 2. List Running Containers:

```
docker ps
```

### 3. List All Containers:

```
docker ps -a
```

### 4. Stop a Running Container:

```
docker stop CONTAINER_ID
```

### 5. Remove a Container:

```
docker rm CONTAINER_ID
```

### 6. Remove All Stopped Containers:

```
docker container prune
```

## 7. Inspect Container Details:

```
docker inspect CONTAINER_ID
```

## 8. Attach to a Running Container:

```
docker exec -it CONTAINER_ID /bin/bash
```

# Image Manipulation:

## 9. List Local Images:

```
docker images
```

## 10. Pull an Image from Docker Hub:

```
docker pull IMAGE[:TAG]
```

## 11. Build an Image from Dockerfile:

```
docker build -t IMAGE_NAME:TAG PATH_TO_DOCKERFILE
```

## 12. Remove an Image:

```
docker rmi IMAGE_ID
```

## 13. Remove All Unused Images:

```
docker image prune
```

# Networking:

## 14. List Networks:

```
docker network ls
```

## 15. Inspect Network Details:

```
docker network inspect NETWORK_ID
```

#### 16. Create a Bridge Network:

```
docker network create --driver bridge NETWORK_NAME
```

#### 17. Connect Container to Network:

```
docker network connect NETWORK_NAME CONTAINER_NAME
```

#### 18. Disconnect Container from Network:

```
docker network disconnect NETWORK_NAME CONTAINER_NAME
```

### Volume Management:

#### 19. List Volumes:

```
docker volume ls
```

#### 20. Inspect Volume Details:

```
docker volume inspect VOLUME_NAME
```

#### 21. Create a Volume:

```
docker volume create VOLUME_NAME
```

#### 22. Remove a Volume:

```
docker volume rm VOLUME_NAME
```

### Container Logs:

#### 23. View Container Logs:

```
docker logs CONTAINER_ID
```

#### 24. Tail Container Logs:

```
docker logs -f CONTAINER_ID
```

## **Docker Compose:**

### **25. Run Docker Compose:**

```
docker-compose up -d
```

### **26. Stop Docker Compose Services:**

```
docker-compose down
```

### **27. Build and Run Docker Compose:**

```
docker-compose up --build -d
```

## **Docker System:**

### **28. Display System-Wide Information:**

```
docker info
```

### **29. Show Docker Disk Usage:**

```
docker system df
```

### **30. Remove All Unused Data:**

```
docker system prune
```

## **Docker Registry:**

### **31. Login to Docker Hub:**

```
docker login
```

### **32. Push Image to Docker Hub:**

```
docker push IMAGE[:TAG]
```

### 33. Pull Image from Private Registry:

```
docker pull REGISTRY_URL/IMAGE[:TAG]
```

## Docker Swarm:

### 34. Initialize Docker Swarm:

```
docker swarm init
```

### 35. Join Node to Swarm:

```
docker swarm join --token TOKEN IP:PORT
```

### 36. List Nodes in Swarm:

```
docker node ls
```

### 37. Create a Service:

```
docker service create [OPTIONS] IMAGE[:TAG] [COMMAND] [ARG...]
```

### 38. Scale a Service:

```
docker service scale SERVICE_NAME=REPLICAS
```

### 39. Inspect Service Details:

```
docker service inspect SERVICE_NAME
```

### 40. Remove a Service:

```
docker service rm SERVICE_NAME
```

## Docker Security:

### 41. Check Container Vulnerabilities:

```
docker scan IMAGE[:TAG]
```

### 42. Run Container with Security Options:

```
docker run --security-opt seccomp=unconfined --cap-add=SYS_PTRACE -it  
IMAGE[:TAG]
```

### 43. Run Container with Readonly Filesystem:

```
docker run --read-only -it IMAGE[:TAG]
```

## Docker Stats:

### 44. Display Real-time Container Resource Usage:

```
docker stats CONTAINER_ID
```

## Docker Events:

### 45. Monitor Docker Events:

```
docker events
```

## Docker Debugging:

### 46. Inspect Docker Bridge Network:

```
docker network inspect bridge
```

### 47. View Docker Daemon Logs:

```
journalctl -u docker
```

#### 48. Check Docker Version:

```
docker version
```

### Miscellaneous:

#### 49. Copy Files between Host and Container:

```
docker cp SOURCE_PATH CONTAINER_ID:DEST_PATH
```

#### 50. Create a Custom Docker Bridge Network:

```
docker network create --driver bridge --subnet=SUBNET_NAME  
CUSTOM_NETWORK_NAME
```

This cheat sheet covers a wide range of Docker commands for container management, image manipulation, networking, and more. Customize commands based on your specific use case and requirements.