Docker Cheatsheet

By Dejan Panovski • Updated on Feb 1, 2026 • Download PDF

Quick reference for Docker commands and concepts

Docker is a platform for building, shipping, and running applications in containers. This cheatsheet covers essential Docker commands for managing containers, images, volumes, networks, and Docker Compose. A handy quick reference for daily Docker workflows.

Container Lifecycle

Create, start, stop, and remove containers.

`docker run image`	Create and start a container
`docker run -d image`	Run container in background
`docker run -it image sh`	Run with interactive shell
`docker run --name myapp image`	Run with a custom name
`docker run -p 8080:80 image`	Map host port to container port
`docker run -v /host:/container image`	Mount a volume
`docker start container`	Start a stopped container
`docker stop container`	Gracefully stop a container
`docker restart container`	Restart a container
`docker rm container`	Remove a stopped container
`docker rm -f container`	Force remove a running container
`docker kill container`	Kill a container (SIGKILL)
`docker pause container`	Pause a running container
`docker unpause container`	Unpause a container

Container Inspection

Monitor and inspect running containers.

`docker ps`	List running containers
`docker ps -a`	List all containers
`docker logs container`	View container logs
`docker logs -f container`	Follow log output
`docker inspect container`	Detailed container info (JSON)
`docker top container`	List running processes
`docker stats`	Live resource usage for all containers
`docker stats container`	Live resource usage for one container
`docker port container`	Show port mappings
`docker diff container`	Show filesystem changes

Images

Pull, build, and manage Docker images.

`docker pull image:tag`	Pull image from registry
`docker push image:tag`	Push image to registry
`docker build -t name .`	Build image from Dockerfile
`docker build -f Dockerfile.dev .`	Build with custom Dockerfile
`docker images`	List local images
`docker rmi image`	Remove an image
`docker tag source target:tag`	Tag an image
`docker save image > file.tar`	Save image to tar archive
`docker load < file.tar`	Load image from tar archive
`docker history image`	Show image layer history

Dockerfile Instructions

Key instructions for writing Dockerfiles.

`FROM image:tag`	Base image
`RUN command`	Execute command during build
`CMD ["executable"]`	Default command at runtime
`ENTRYPOINT ["executable"]`	Fixed command at runtime
`COPY src dest`	Copy files from host
`ADD src dest`	Copy files (supports URLs, tar)
`WORKDIR /path`	Set working directory
`EXPOSE 80`	Document container port
`ENV KEY=value`	Set environment variable
`ARG KEY=value`	Build-time variable
`VOLUME ["/data"]`	Create mount point
`USER username`	Set runtime user

Volumes

Manage persistent data with volumes.

`docker volume create vol`	Create a named volume
`docker volume ls`	List volumes
`docker volume inspect vol`	Volume details
`docker volume rm vol`	Remove a volume
`docker volume prune`	Remove unused volumes
`docker run -v vol:/data image`	Mount named volume
`docker run -v /host:/data image`	Bind mount host directory
`docker run --tmpfs /tmp image`	Mount tmpfs (in-memory)

Networks

Create and manage container networks.

`docker network create net`	Create a network
`docker network ls`	List networks
`docker network inspect net`	Network details
`docker network rm net`	Remove a network
`docker network connect net container`	Connect container to network
`docker network disconnect net container`	Disconnect from network
`docker run --network net image`	Run container on network

Docker Compose

Manage multi-container apps with Docker Compose .

`docker compose up`	Create and start services
`docker compose up -d`	Start in background
`docker compose down`	Stop and remove services
`docker compose down -v`	Also remove volumes
`docker compose build`	Build service images
`docker compose ps`	List running services
`docker compose logs`	View service logs
`docker compose logs -f service`	Follow logs for a service
`docker compose exec service sh`	Shell into running service
`docker compose pull`	Pull service images
`docker compose restart`	Restart all services

System & Cleanup

Monitor disk usage and clean up resources.

`docker system df`	Show Docker disk usage
`docker system prune`	Remove unused data
`docker system prune -a`	Remove all unused data
`docker image prune`	Remove dangling images
`docker image prune -a`	Remove all unused images
`docker container prune`	Remove stopped containers
`docker volume prune`	Remove unused volumes
`docker network prune`	Remove unused networks

Exec & Copy

Run commands in containers and copy files.

`docker exec -it container sh`	Open shell in container
`docker exec container command`	Run command in container
`docker exec -u root container cmd`	Run as specific user
`docker cp container:/path ./local`	Copy from container
`docker cp ./local container:/path`	Copy to container
`docker attach container`	Attach to running container
`docker wait container`	Wait for container to stop

Registry & Login

Authenticate and interact with registries.

`docker login`	Log in to Docker Hub
`docker login registry.example.com`	Log in to private registry
`docker logout`	Log out from registry
`docker search term`	Search Docker Hub
`docker push user/image:tag`	Push image to registry
`docker pull user/image:tag`	Pull image from registry