

Docker CLI Cheat Sheet

(for version 1.12.0)

Finding Information

docker info	Display system-wide information
docker {-v --version}	show docker client version
docker version	Show version information of docker, docker daemon, underlying go language , API , git build tag etc.
docker inspect {Container Image}	Return low-level information on a container or Image

Container Lifecycle Management

docker create [OPTIONS] Image [COMMAND] [ARG...]	Create a new container
docker run [OPTIONS] Image [COMMAND] [ARG...]	Run a command in a new container

-i, --interactive	Keep STDIN open even if not attached	Options for both docker create and docker run
-t, --tty	Allocate a pseudo-TTY	
-d, --detach	(-d applies to docker run only) Run container in background and print container ID	
-a, --attach value	Attach to STDIN, STDOUT or STDERR	
-c, --cpu-shares int	CPU shares (relative weight)	
-e, --env value	Set environment variables	
-h, --hostname string	Container host name	
-l, --label value	Set meta data on a container	
-m, --memory string	Memory limit	
-p, --publish value	Publish a container's port(s) to the host	
-P, --publish-all	Publish all exposed ports to random ports	
-u, --user string	Username or UID (format: <name uid>[:<group gid>])	
-v, --volume value	Bind mount a volume	
-w, --workdir string	Working directory inside the container	

docker start [OPTIONS] [CONTAINER]	Start one or more stopped containers
-a, --attach	Attach STDOUT/STDERR and forward signals
-i, --interactive	Attach container's STDIN
docker pause [CONTAINER]	Pause all processes within a container
docker unpause [CONTAINER]	Unpause all processes within a container
docker restart [OPTIONS] [CONTAINER]	Restart a running container
-t, --time int	Seconds to wait for stop before killing the container(default 10)
docker kill [OPTIONS] [CONTAINER]	Kill a running container
-s, --signal string	Signal to send to the container (default "KILL")
docker stop [OPTIONS] [CONTAINER]	Stop a running container
-t, --time int	Seconds to wait for stop before killing the container(default 10)
docker rm [OPTIONS] [CONTAINER]	Remove one or more containers
-f, --force	Force the removal of a running container (uses SIGKILL)
-v, --volumes	Remove the volumes associated with the container

docker cp [OPTIONS] Container:SRC_PATH DEST_PATH -	Copy files/folders from a container to a HOSTDIR or to STDOUT
docker cp [OPTIONS] SRC_PATH - Container:DEST_PATH	

-L, --follow-link	Always follow symbol link in SRC_PATH
docker exec [OPTIONS] Container command [ARG...]	Run a command in a running container
docker export [OPTIONS] Container	Export a container's filesystem as a tar archive
-o, --output string	Write to a file, instead of STDOUT

docker ps [OPTIONS]	List containers
-a, --all	Show all containers (default shows just running)
-n, --last int	Show n last created containers (includes all states) (default -1)
-l, --latest	Show the latest created container (includes all states)
-q, --quiet	Only display numeric IDs

docker rename OLD_NAME NEW_NAME	Rename a container
docker top Container [ps OPTIONS]	Display the running processes of a container
docker attach [OPTIONS] Container	Attach to a running container

-t, --time int	Seconds to wait for stop before killing the container(default 10)
docker diff Container	Inspect changes on a container's filesystem
docker events [OPTIONS]	Get real time events from the server
docker logs [OPTIONS] Container	Fetch the logs of a container
-f, --follow	Follow log output
--tail string	Number of lines to show from the end of the logs (default "all")
-t, --timestamps	Show timestamps

docker port Container [PRIVATE_PORT[/PROTO]]	List port mappings or a specific mapping for the container
docker stats [OPTIONS] [Container...]	Display a live stream of container(s) resource usage statistics
--no-stream	Disable streaming stats and only pull the first result
docker update [OPTIONS] Container	Update configuration of one or more containers
-c, --cpu-shares	CPU shares (relative weight)
-m, --memory	Memory limit
--memory-swap	Swap limit equal to memory plus swap: '-1' to enable unlimited swap
--restart	Restart policy to apply when a container exits
docker wait Container [Container...]	Block until a container stops, then print its exit code

Working with Images

docker build [OPTIONS] PATH URL -	Build an Image from a Dockerfile
-f, --file string	Name of the Dockerfile (Default is 'PATH/Dockerfile')
--no-cache	Do not use cache when building the Image
-q, --quiet	Suppress the build output and print Image ID on success
--rm	Remove intermediate containers after a successful build (default true)
-t, --tag value	Name and optionally a tag in the 'name:tag' format (default [])

docker commit [OPTIONS] Container [REPOSITORY[:TAG]]	Create a new Image from a container's changes
-a, --author string	Author (e.g., "John Hannibal Smith <hannibal@team.com>")
-c, --change value	Apply Dockerfile instruction to the created Image (default [])
-m, --message string	Commit message
-p, --pause	Pause container during commit (default true)

docker history [OPTIONS] IMAGE	Show the history of an Image
-H, --human	Print sizes and dates in human readable format (default true)

docker images [OPTIONS] [REPOSITORY[:TAG]]	List Images
-f, --filter value	Filter output based on conditions provided

docker import [OPTIONS] file URL - [REPOSITORY[:TAG]]	Import the contents from a tarball to create a Image
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docker load [OPTIONS]	Load an Image from a tar archive or STDIN
-i, --input string	Read from tar archive file, instead of STDIN

docker rmi [OPTIONS] Image [Image...]	Remove one or more Images
-f, --force	Force removal of the Image

docker save [OPTIONS] Image [Image...]	Save Images to a tar archive
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docker tag Image [:TAG] Image [:TAG]	Tag an Image into a repository
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Working with Registries

docker login [OPTIONS] [SERVER]	Register or log in to a Docker registry
docker logout [SERVER]	Log out from a Docker registry
docker pull [OPTIONS] NAME[:TAG @DIGEST]	Pull an Image or a repository from a Docker registry
-a, --all-tags	Download all tagged images in the repository
docker push [OPTIONS] NAME[:TAG]	Push an image or a repository to a Docker registry
docker search [OPTIONS] TERM	Search the Docker Hub for images

Managing Networks

docker network connect [OPTIONS] NETWORK CONTAINER	Connect a container to a network
--ip string	IP Address
docker network create [OPTIONS] NETWORK	Create a new network
-d, --driver string	Driver to manage the Network (default "bridge")
--gateway value	IPv4 or IPv6 Gateway for the master subnet (default [])
--internal	Restrict external access to the network
--label value	Set metadata on a network (default [])
-o, --opt value	Set driver specific options (default map[])

--subnet value	Subnet in CIDR format that represents a network segment (default [])
docker network disconnect [OPTIONS] NETWORK CONTAINER	Disconnect a container from a network
docker network inspect [OPTIONS] NETWORK	Display information about a network
docker network ls [OPTIONS]	Lists all the networks the Engine daemon knows about
docker network rm NETWORK [NETWORK...]	Removes one or more networks

Managing Container Volumes

docker volume create [OPTIONS]	Creates a new volume where containers can consume and store data
-d, --driver string	Specify volume driver name (default "local")
--name string	Specify volume name
docker volume inspect [OPTIONS] VOLUME	Display information about a volume
docker volume ls [OPTIONS]	Lists all the volumes Docker knows about
docker volume rm VOLUME [VOLUME...]	Remove one or more volumes

Managing Swarm Nodes

docker node promote NODE [NODE...]	Promote a node that is pending a promotion to manager
docker node demote NODE [NODE...]	Demotes an existing manager so that it is no longer a manager
docker node inspect [OPTIONS] self NODE [NODE...]	Inspect a node in the swarm
docker node update [OPTIONS] NODE	Update attributes for a node
--availability string	Availability of the node (active/pause/drain)
--role string	Role of the node (worker/manager)
docker node ps [OPTIONS] self NODE	List tasks running on a node
docker node ls [OPTIONS]	List nodes in the swarm
docker node rm [OPTIONS] NODE	Remove one or more nodes from the swarm
--force	Force remove an active node

Working with Swarm

docker swarm init [OPTIONS]	Initialize a swarm
--advertise-addr string	string Advertised address (format: <ip interface>[:port])
--force-new-cluster	Force create a new cluster from current state
--listen-addr value	Listen address (format: <ip interface>[:port]) (default 0.0.0.0:2377)
docker swarm join [OPTIONS] HOST:PORT	Join a swarm as a manager node or worker node
--advertise-addr string	Advertised address (format: <ip interface>[:port])
--listen-addr value	Listen address (format: <ip interface>[:port]) (default 0.0.0.0:2377)
--token string	Token for entry into the swarm
docker swarm leave [OPTIONS]	Remove the current node from the swarm
--force	Force leave ignoring warnings
docker swarm update [OPTIONS]	Update attributes of a swarm
--cert-expiry duration	Validity period for node certificates (default 2160h0m0s)
--dispatcher-heartbeat duration	Dispatcher heartbeat period (default 5s)
--external-ca value	Specifications of one or more certificate signing endpoints
--task-history-limit int	Task history retention limit (default 5)
docker swarm join-token [--rotate] (worker manager)	Display or rotate join tokens

Managing Swarm Services

docker service create [OPTIONS] IMAGE [COMMAND] [ARG...]	Create a new service
docker service inspect [OPTIONS] SERVICE [SERVICE...]	Inspect a service
docker service ls [OPTIONS]	List services in the swarm
docker service rm [OPTIONS] SERVICE [SERVICE...]	Remove a swervice from the swarm
docker service scale SERVICE=REPLICAS [SERVICE=REPLICAS...]	Set the number of replicas for the desired state of the service
docker service ps [OPTIONS] SERVICE	List the tasks of a service
docker service update [OPTIONS] SERVICE	Update the attributes of a service



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