# Buildah Build OCI images

## CONCEPTS

No daemon: buildah works on local storage directly and runs fine rootless. Working containers are build scratchpads, not services.

**Image** base or scratch
↓ `buildah from`
**Working container** run, copy, config
↓ `buildah commit`
**New image** local storage
↓ `buildah push`
**Registry / archive** docker://, oci:, dir:

## BUILD FROM A FILE

`buildah build -t <image> .`
Build an image from a Containerfile

`buildah build -f <file> -t <image> <dir>`
Use a specific Containerfile and context

`buildah build --build-arg <k>=<v> .`
Set a build argument

`buildah build --layers .`
Cache intermediate layers (off by default)

## WORKING CONTAINERS

`buildah from <image>`
Create a working container, print its name

`buildah from scratch`
Start from an empty root filesystem

`buildah containers`
List working containers

`buildah rm <ctr>`
Remove a working container

`buildah run <ctr> -- <cmd>`
Run a command inside the container

`buildah run -t <ctr> -- sh`
Interactive shell with a terminal

## ADD CONTENT

`buildah copy <ctr> <src> <dest>`
Copy files into the container

`buildah copy --chown <user>:<group> <ctr> <src> <dest>`
Set owner while copying

`buildah mount <ctr>`
Print the container root filesystem path

## CONFIGURE AND COMMIT

`buildah config --entrypoint '<json-array>' <ctr>`
Set the entrypoint

`buildah config --cmd '<cmd>' <ctr>`
Set the default command

`buildah config --env <k>=<v> <ctr>`
Set an environment variable

`buildah commit <ctr> <image>`
Create an image from the container

`buildah commit --rm <ctr> <image>`
Commit, then delete the container

## IMAGES AND REGISTRIES

`buildah images`
List local images

`buildah inspect <name>`
Show config of a container or image

`buildah pull <image>`
Fetch an image into local storage

`buildah push <image> <dest>`
Push to a registry or other transport

`buildah push <image> docker://<registry>/<repo>:<tag>`
Push to a registry explicitly

`buildah tag <image> <new-name>`
Add another name to an image

`buildah rmi <image>`
Remove an image

`buildah login <registry>`
Log in to a registry