



Container vs. VM Cheat Sheet

The core distinctions that explain why containers are fast, small, and not a lightweight virtual machine.

Image -> Container -> Isolation -> Delivery

IMAGE VS. CONTAINER

- Image: a read-only snapshot
- Container: a running instance of it
- One image can produce many containers
- Container changes vanish when it's removed

CONTAINER VS. VM

- No guest OS to boot
- Runs on the host's own kernel
- Starts in milliseconds, not minutes
- Image size: megabytes, not gigabytes

WHAT GETS ISOLATED

- Its own filesystem view
- Its own process tree
- Its own network stack and ports
- Capped CPU and memory limits

COMMON MISCONCEPTIONS

- "It's basically a lightweight VM"
- "My file changes are safe in there"
- "An image and container are the same"
- "Docker is the only real engine"