

# container kernel features

## containers use these Linux kernel features

"container" doesn't have a clear definition, but Docker containers use all of these features.

## ♥ pivot\_root ♥

set a process's root directory to a directory with the contents of the the container image

## ★ cgroups ★

limit memory/CPU usage for a group of processes



## ♥ namespaces ♥

allow processes to have their own:

- network
- PIDs
- hostname
- mounts
- users
- + more

## ★ capabilities ★

security: give specific permissions

## ♥ seccomp-bpf ♥

security: prevent dangerous system calls

## ★ overlay filesystems ★

this is what makes layers work! Sharing layers saves disk space & helps containers start faster