Container Panel Discussion

Concepts, Challenges, First Steps

Who here uses smartphones?

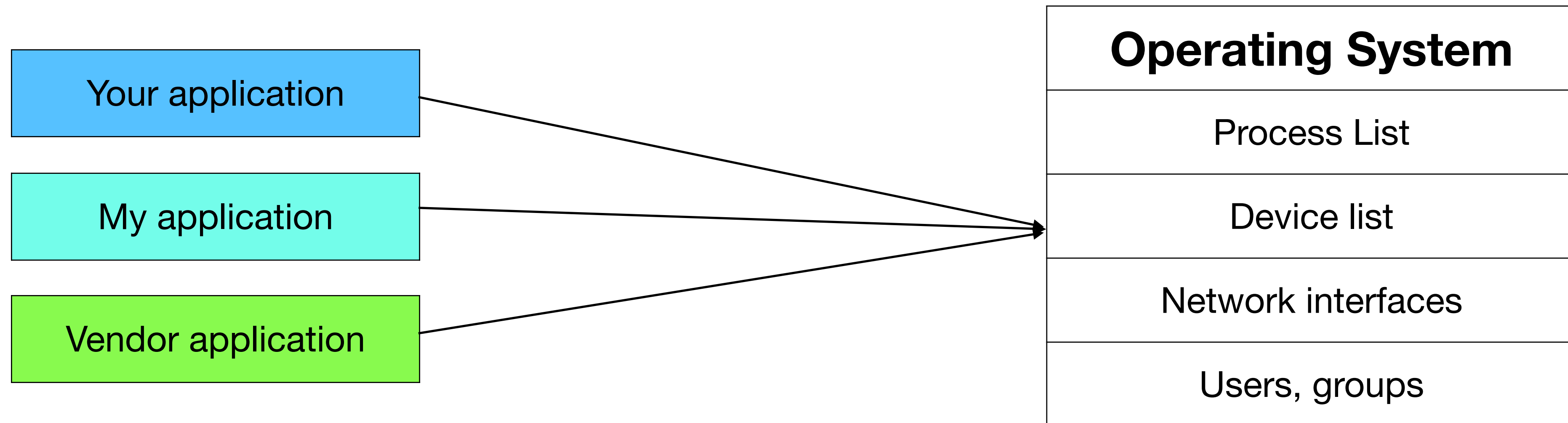# Who here uses containers?

Those numbers should match.

Containers are everywhere.

What is a container?

What is a container?

- "A container is a standard unit of software that packages up code and all its dependencies so the application runs quickly and reliably from one computing environment to another."

- "Containers give developers the ability to create predictable environments that are isolated from other applications."

- "Containers are a form of 'operating system virtualization'."

- Containers package software along with dependencies and runtime environment so that they may be run anywhere with little to no configuration. Containers do not require emulation or virtual machines - contained processes are real processes on the OS with no performance hit.
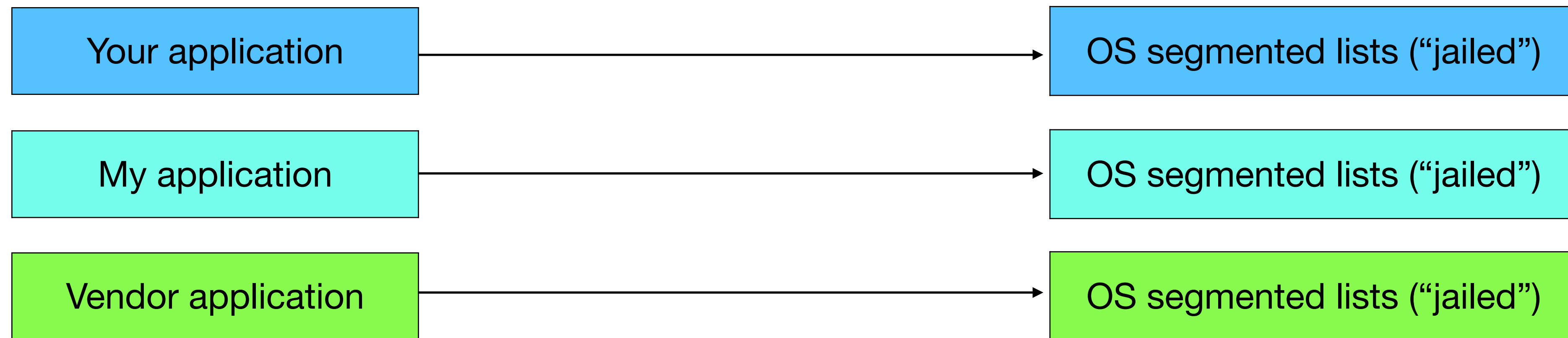
Without containers

Operating System
Process List
Device list
Network interfaces
Users, groups

Your application

My application

Vendor application

If any application asks for a count of applications running, the OS reports three.

With containers

Your application	OS segmented lists ("jailed")
My application	OS segmented lists ("jailed")
Vendor application	OS segmented lists ("jailed")

If any application asks for a count of applications running, the OS reports **one.**

Why use containers instead of virtual machines?

What do you use containers for?

What challenges have you faced using containers?

How do containers change your approach to security?

Do you use any container orchestration?
What problems do they solve for you?

What would your advice be for teams considering the use of containers?