What Are Containers?

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Applications run businesses

Setting the Scene
Applications run businesses

Applications run businesses

Applications run on servers

Applications run businesses

Applications run on servers

- Procurement lead times
- Up-front capex
- Ongoing opex

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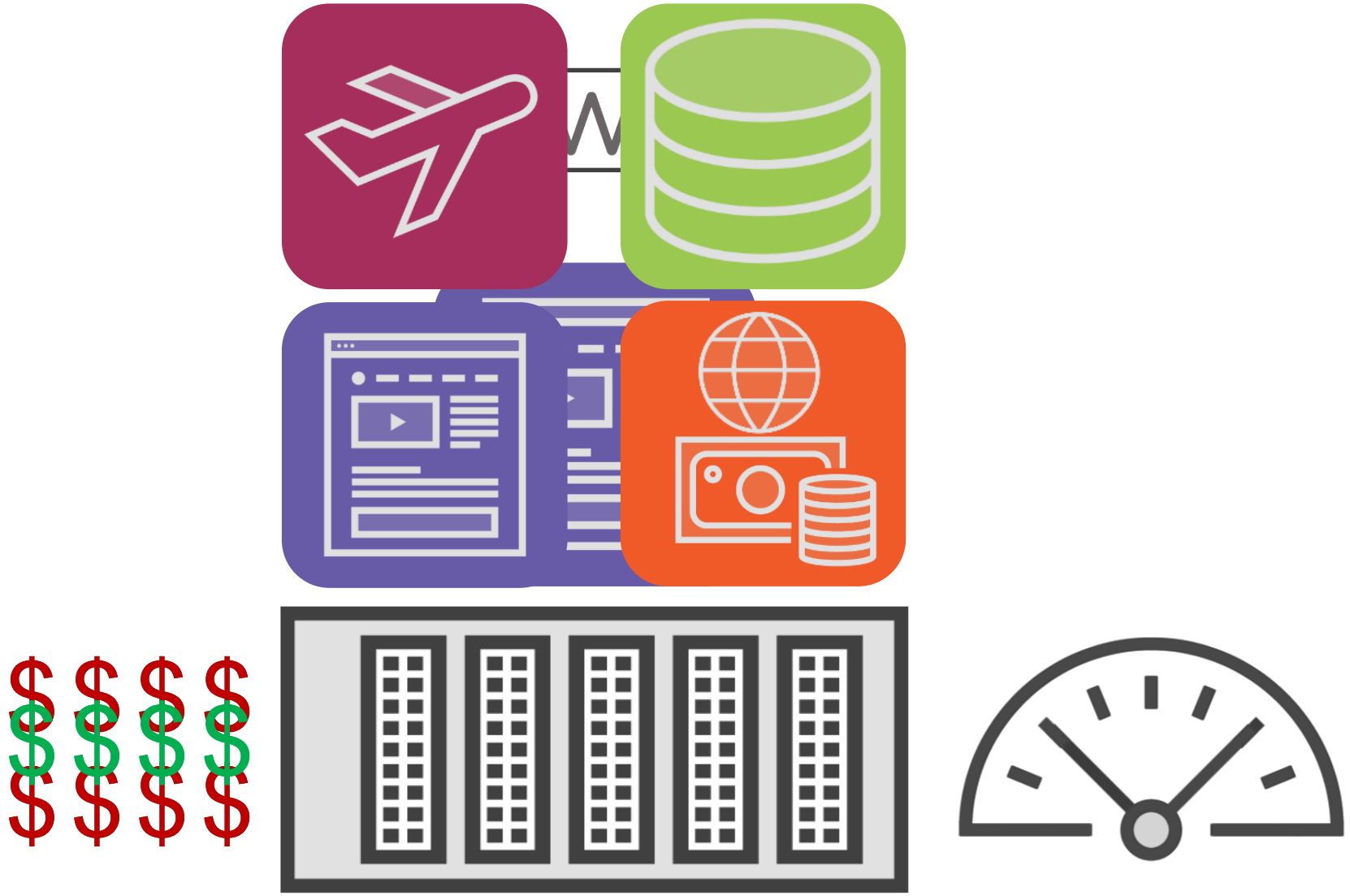
Hypervisors allow multiple apps per server



The Trouble with Hypervisors

Applications run businesses

Applications run on servers

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- Up-front capex
- Ongoing opex

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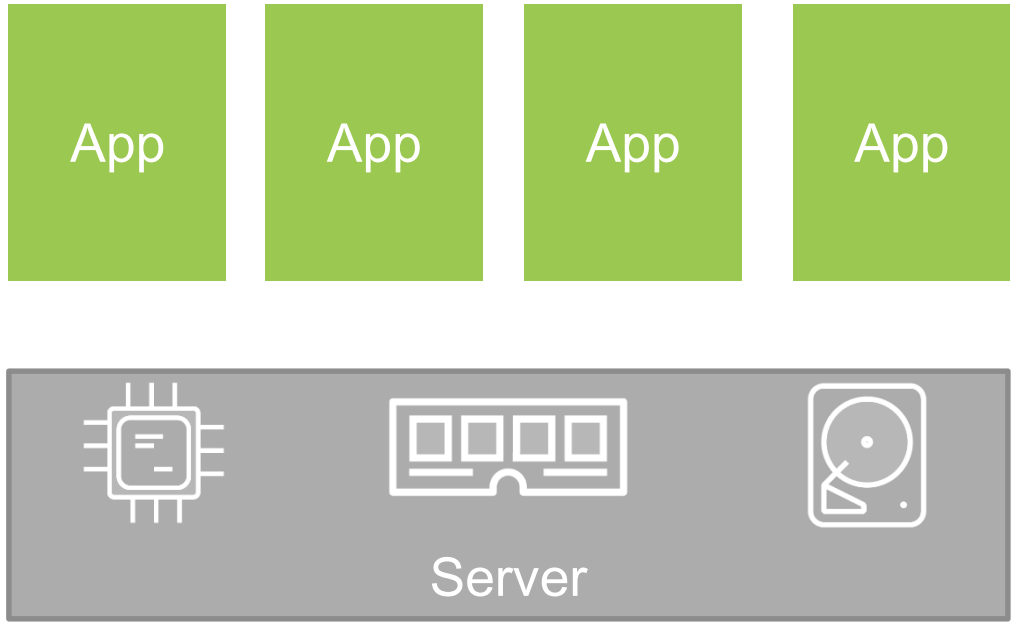

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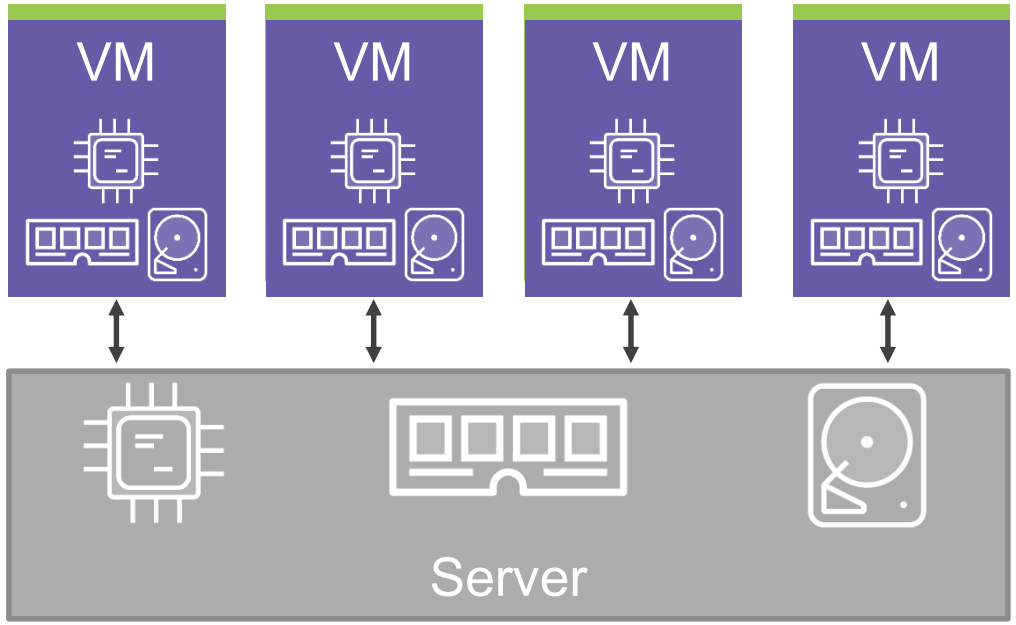

Applications run businesses

Applications run on servers

- Procurement lead times
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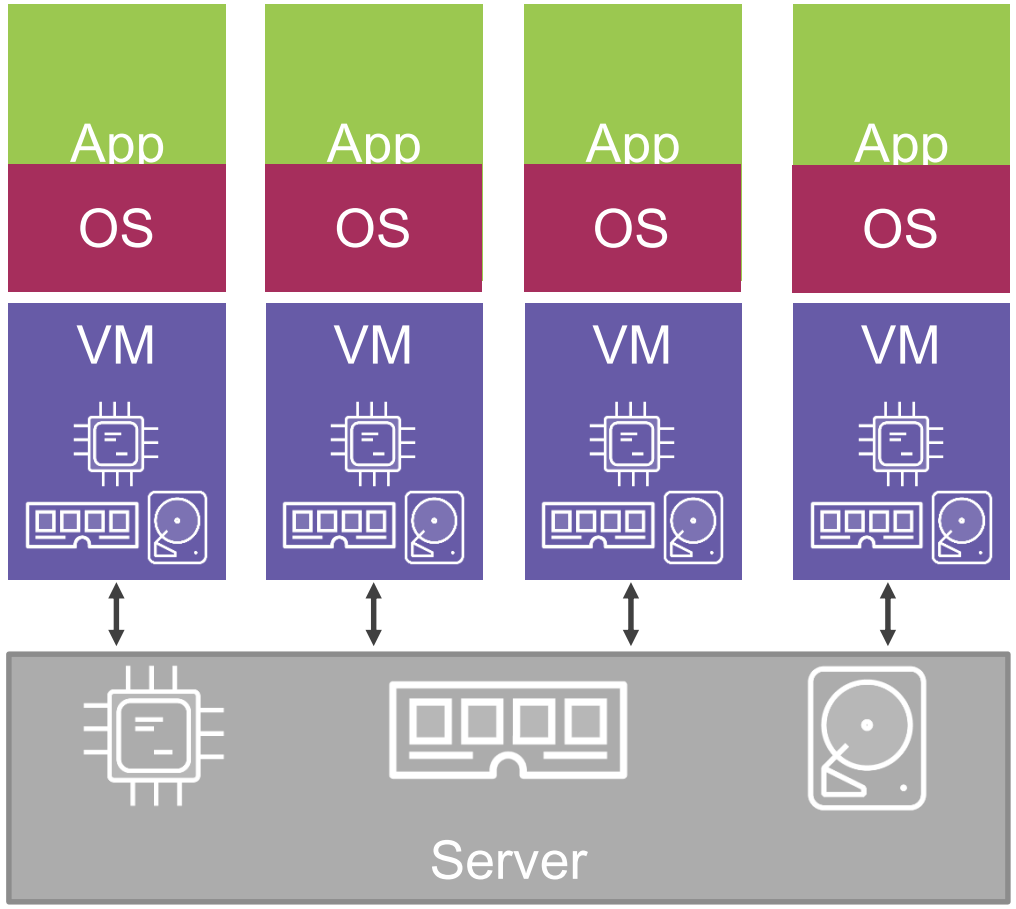
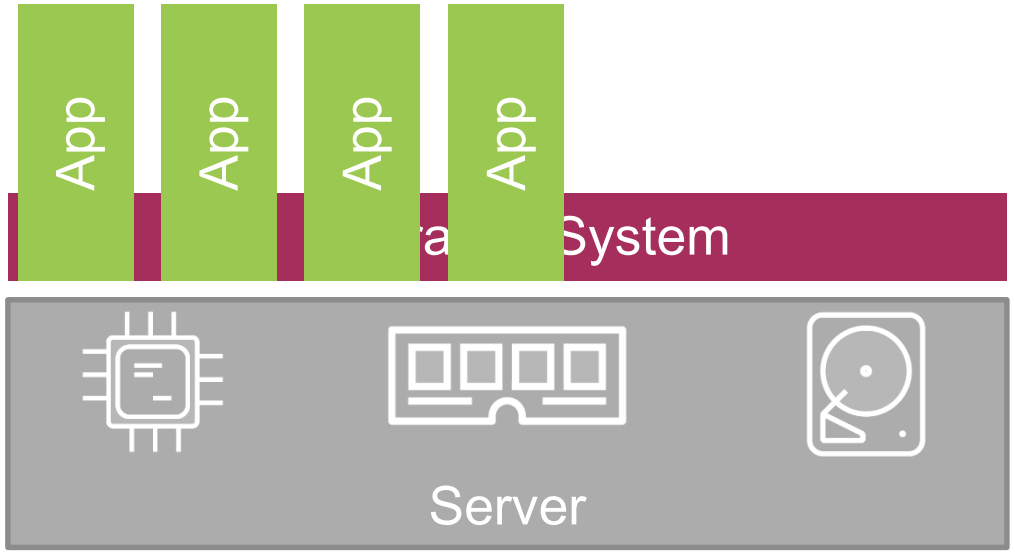
Hypervisors allow multiple apps per server

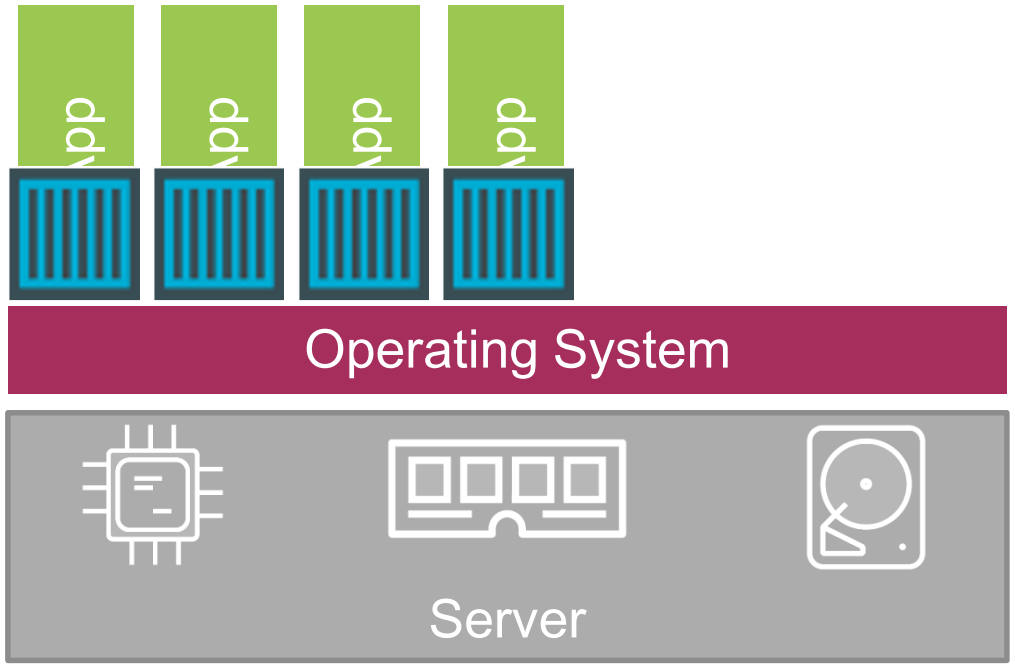
Each OS:

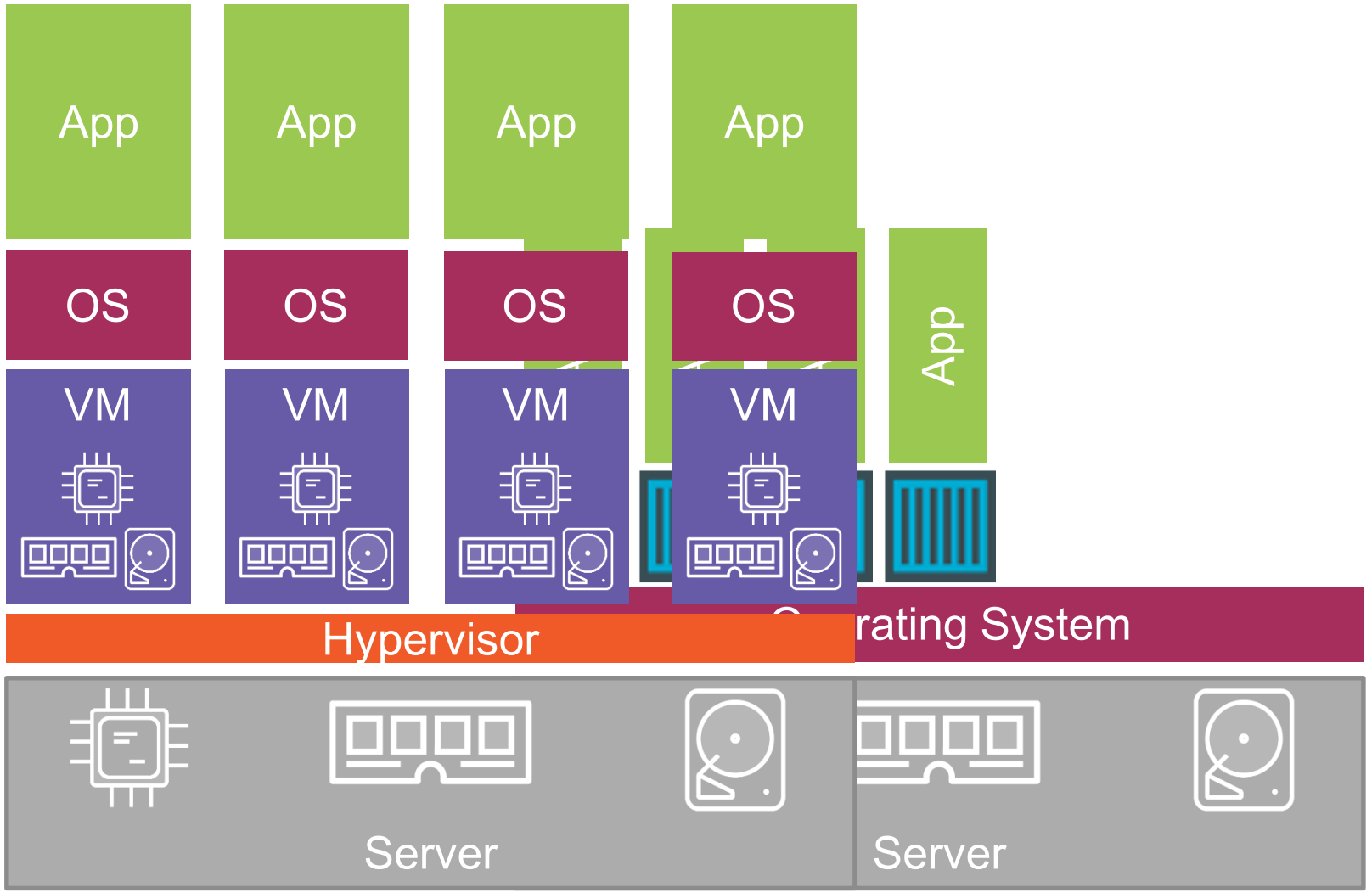
- Uses CPU
- Uses RAM
- Uses disk
- May have license cost
- Requires admin time



Containers

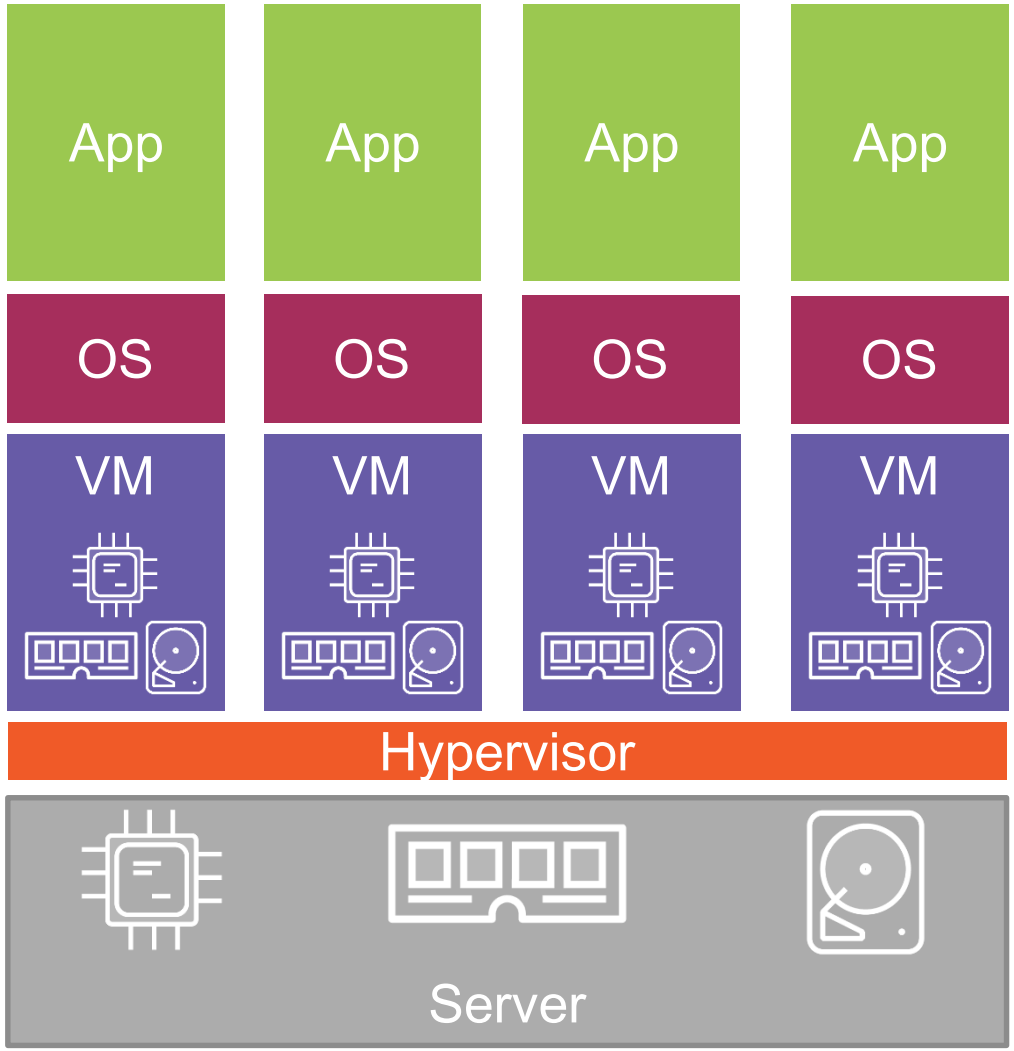

App
App
App
App
System
Server


app
app
app
app
Operating System
Server

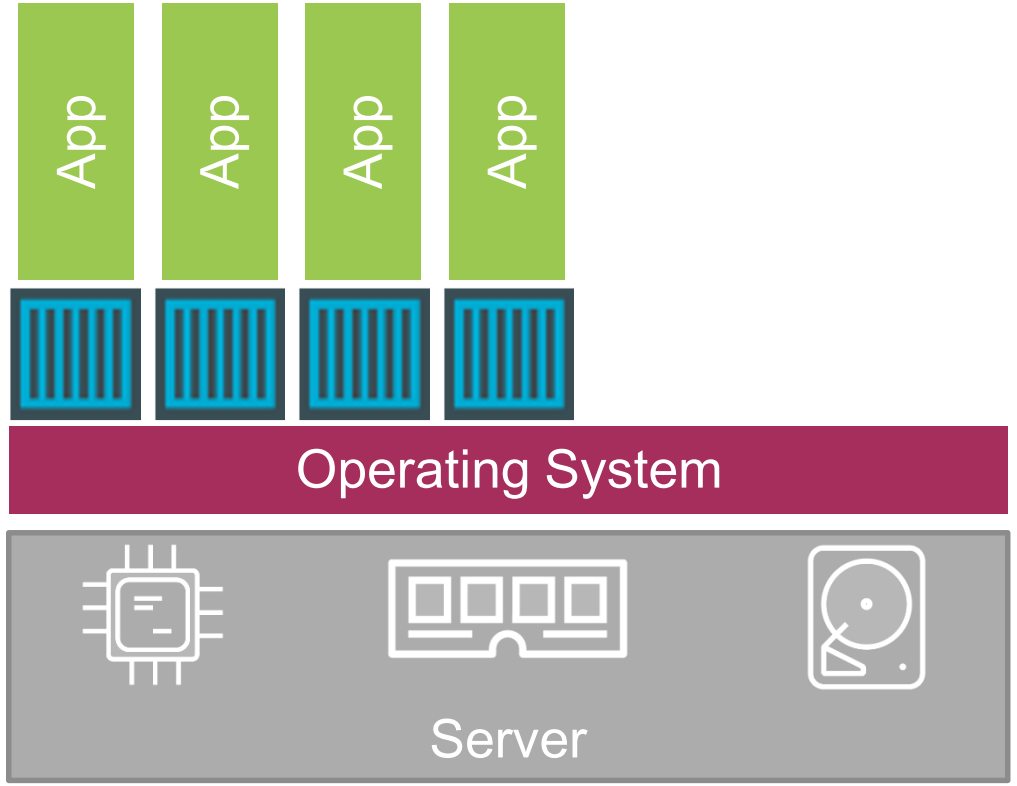


Hypervisor Architecture

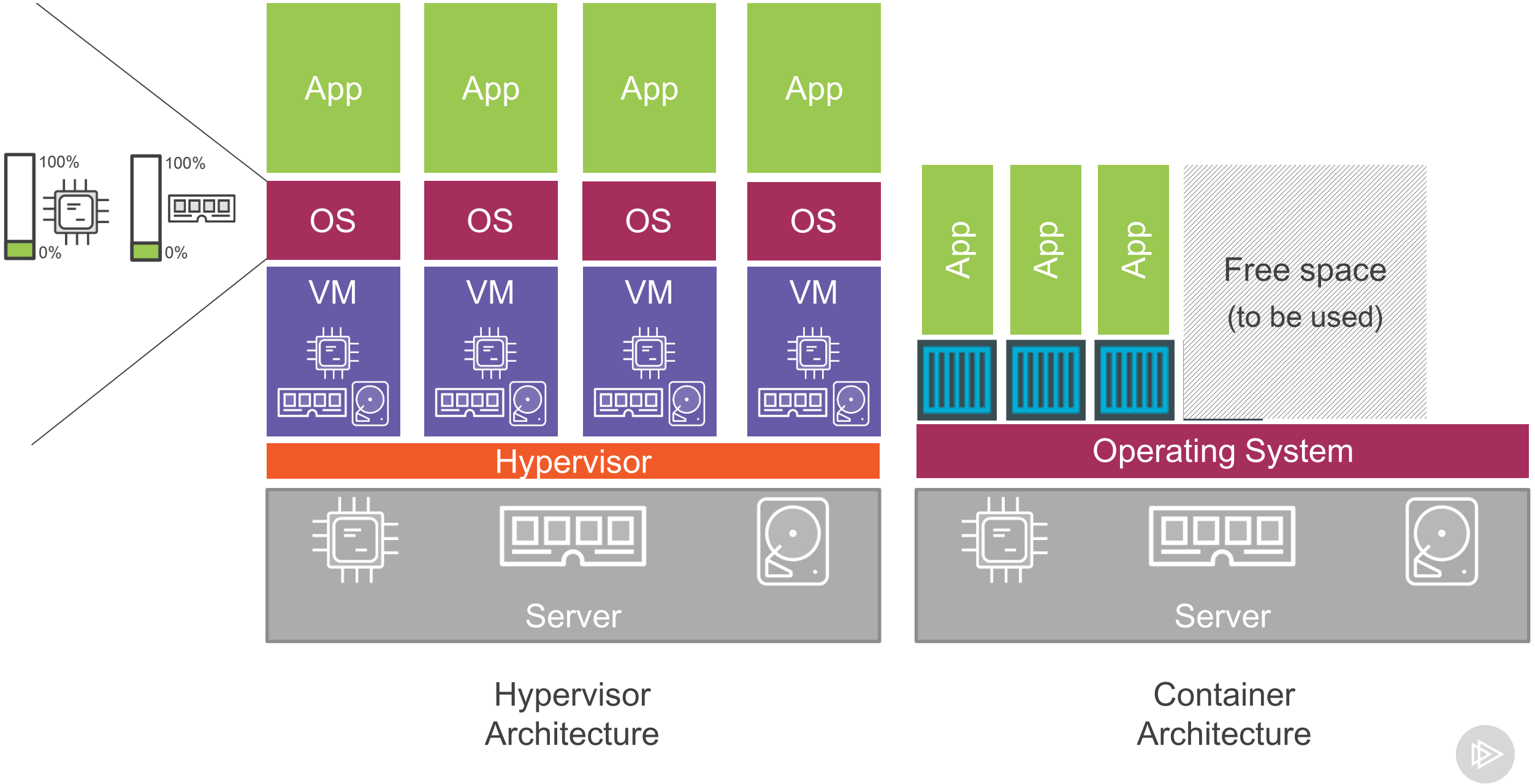
Container Architecture



Hypervisor
Architecture

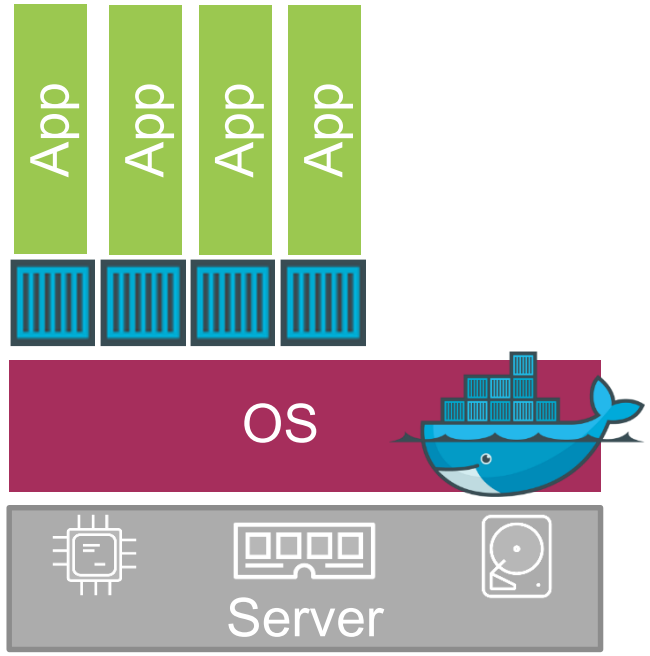


Container
Architecture



Hypervisor Architecture

Container Architecture


App
App
App
App
OS
Server

Summary

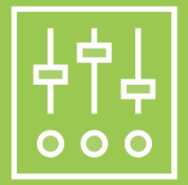
Past
(physical servers)

Wasted!

Wasted!

Wasted!

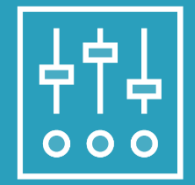
Present
(Hypervisor virtualization)



More efficient than physical servers

Could be better!

Present/Future
(Containers)



More efficient than Hypervisor virtualization

Virtualization 2.0

Less mature than Hypervisor virtualization

Less mature than Hypervisor ecosystem

Coming Up Next…

Docker Docker Docker…