Introduce Windows Containers

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What This Module Covers

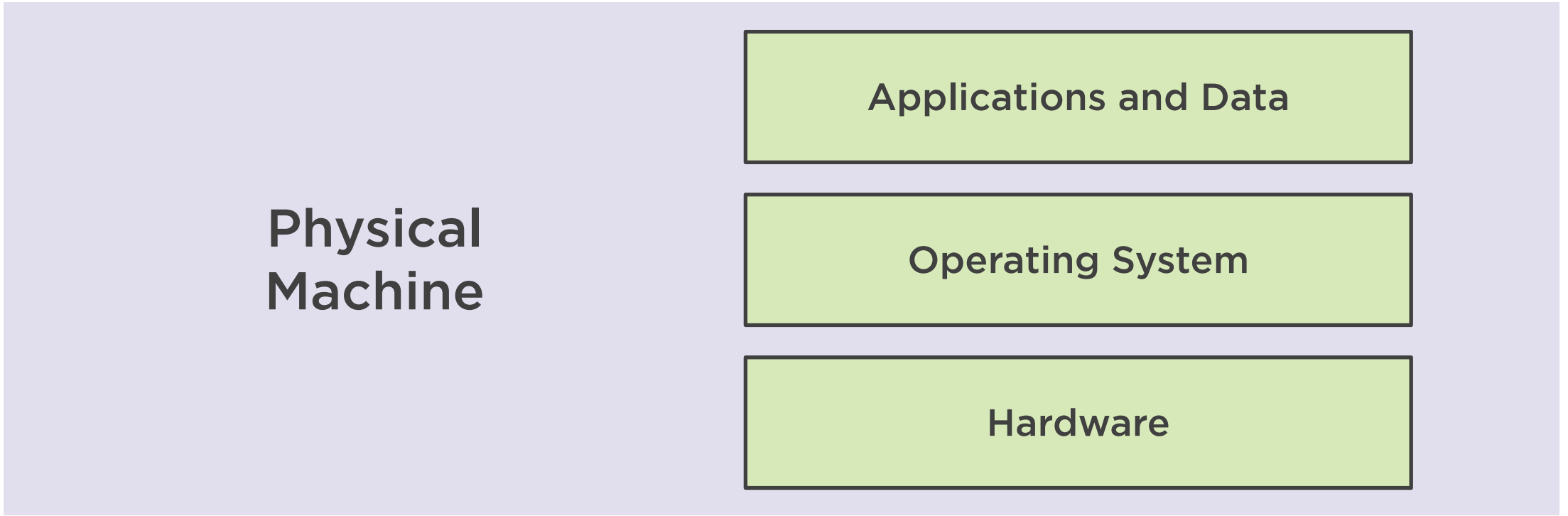
What Is a Windows Container?

Understand the Use Cases for Windows Containers

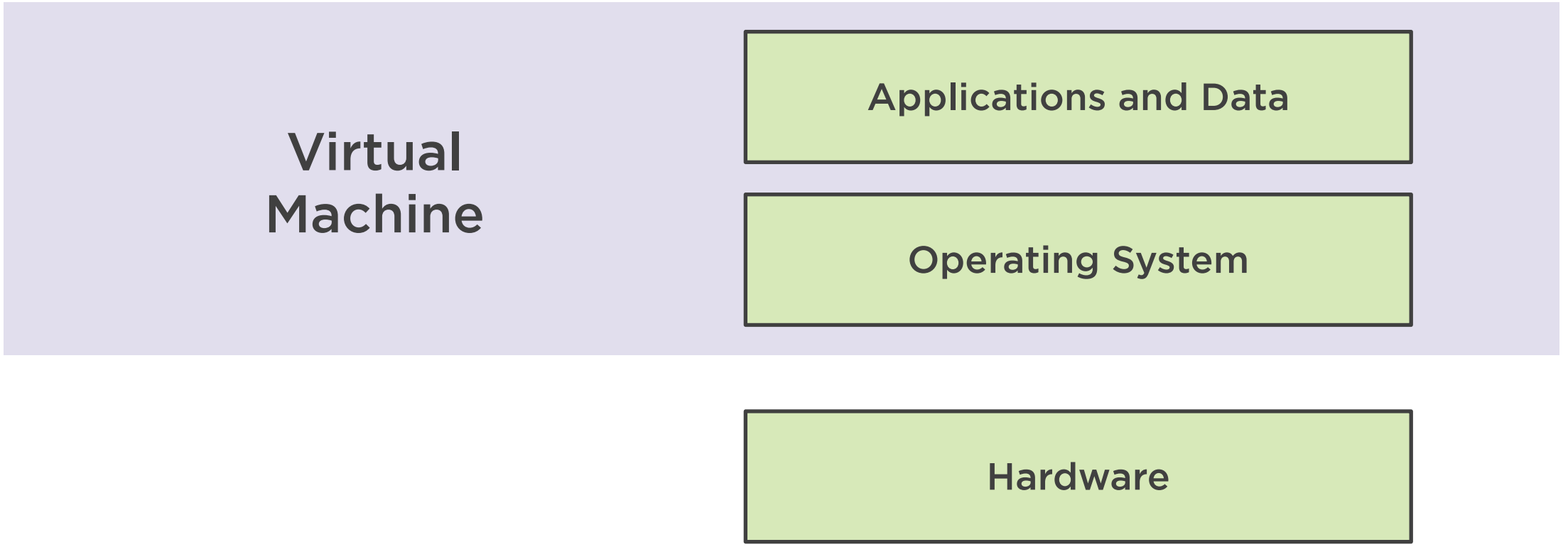
Explore Container Terminology

Introduce Docker for Windows

What Is a Windows Container?



What Is a Windows Container?



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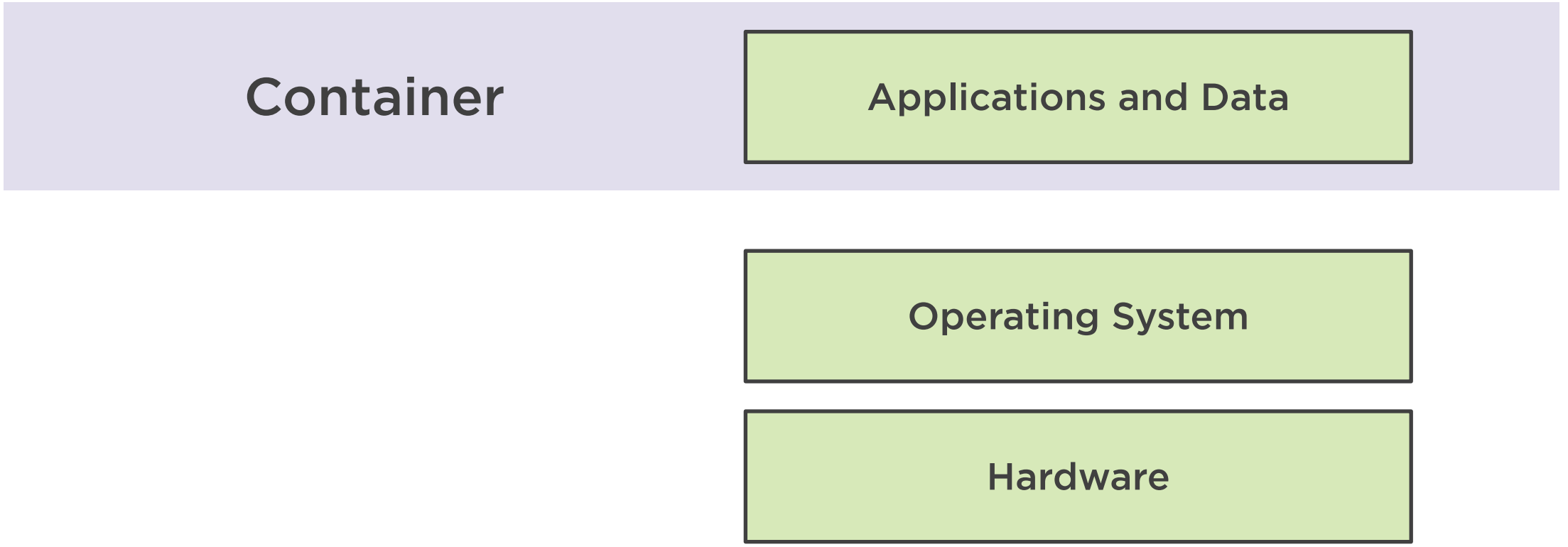

Containers are Ephemeral

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...when the process that initiates them ends, they end...

Containers are Ephemeral

You start a container.

That container starts a process.

That process performs its mission.

The process finishes its mission.

The process terminates.

The container stops.

Containers are Ephemeral

(Why is this cool?)

Well-designed containers only use resources when they perform useful work

Containerized applications tend to be easier to scale

Containerizing applications separates their functions into individual compute units

Container recycling limits exposure

Containers are Ephemeral

(Why is this cool?)

Containers are tiny

Containers start ridiculously fast

Containers don't (necessarily) need IT Ops to build individual instances

Containers can be packaged and instantiated directly from developer IDEs

A container on a Windows desktop

A container on a Windows desktop
is exactly the same

A container on a Windows desktop
is exactly the same
as a container on a Windows server

Understand the Use Cases for Windows Containers

Facilitates dev environments that precisely mirror test and production

Enables developers to push dev changes directly into test and production

Delivers a platform for isolating application functions into discrete compute units

Aligns IT Ops activities with developer needs, while helping developers think more like IT Ops

Some cautions...

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Containers can't be rebooted

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Containers sometimes think about security differently

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Windows Containers can't be run with Linux Containers

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Syntax for building and running containers is frustrating

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Windows Containers can't be run with Linux Containers

Syntax for building and running containers is frustrating

Doing containers correctly isn't easy

Explore Container Terminology

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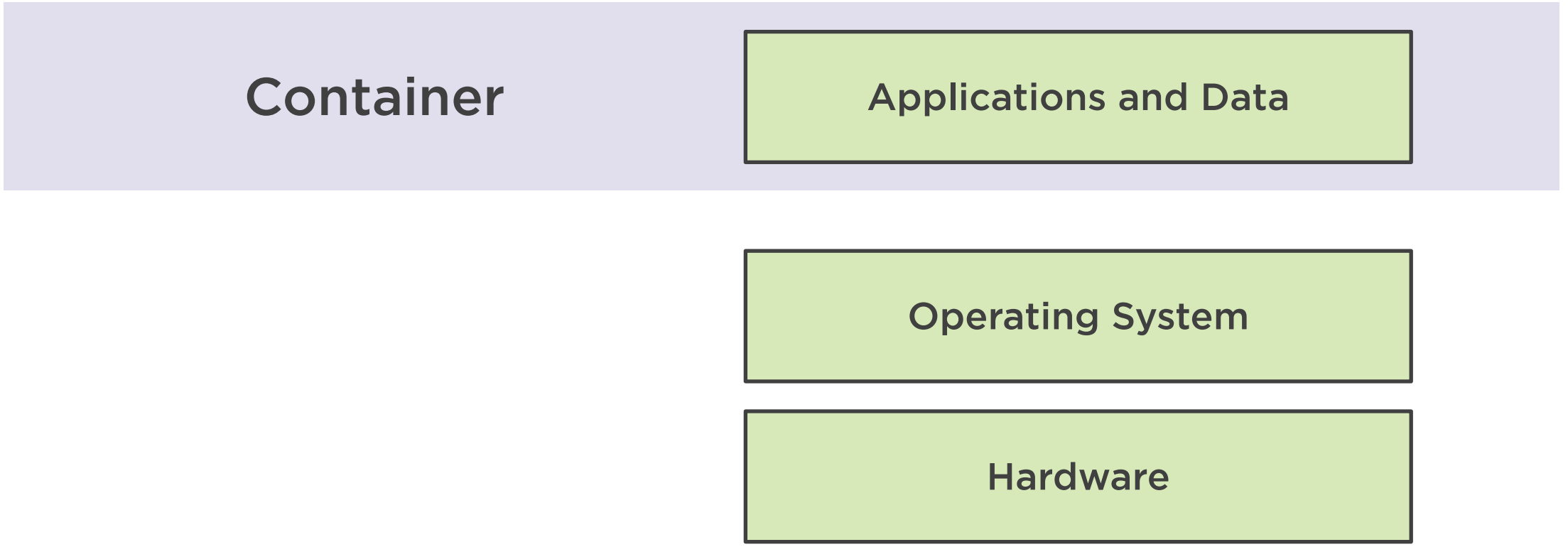

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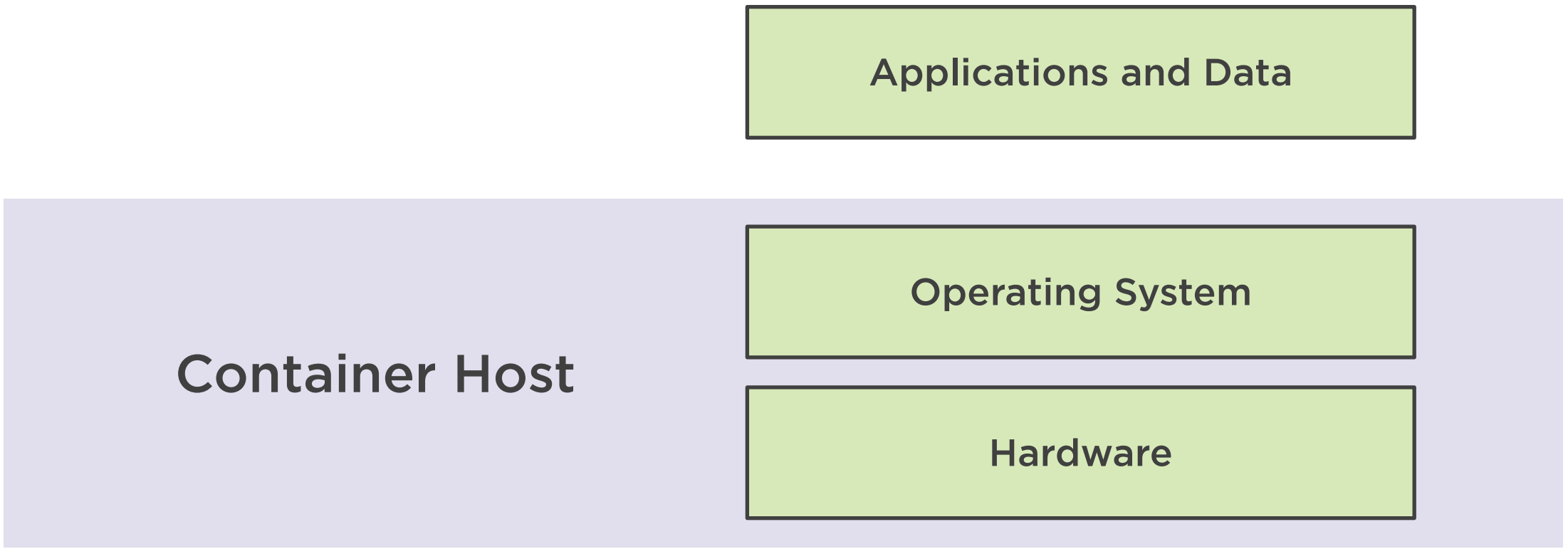

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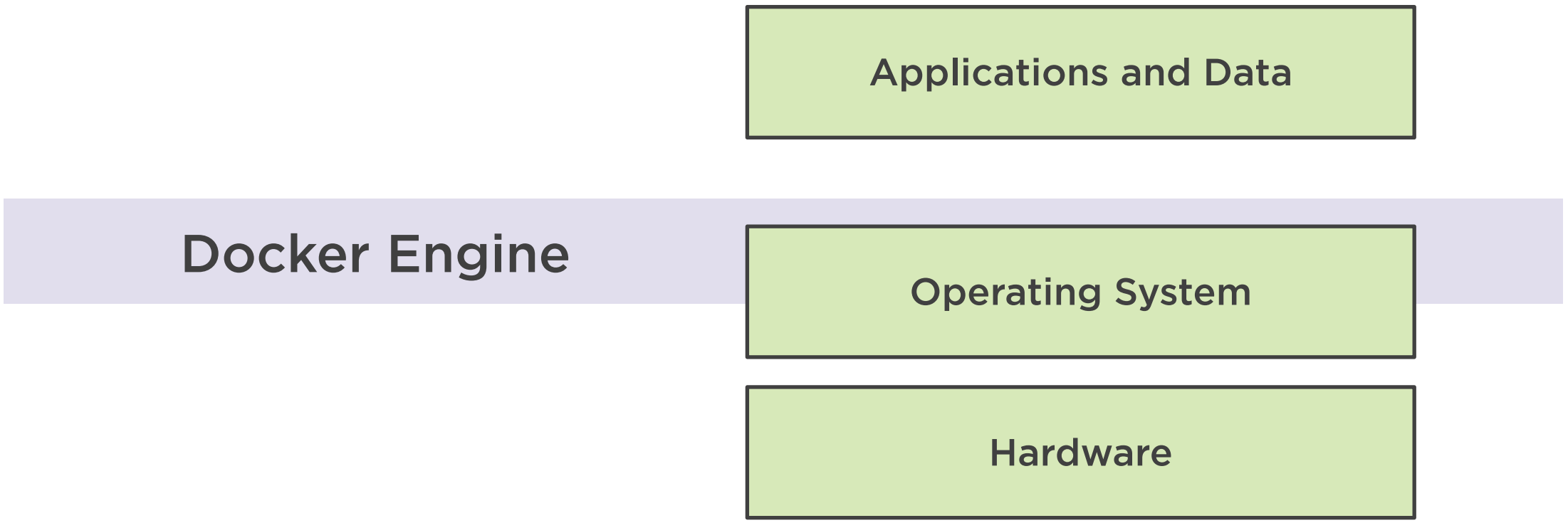

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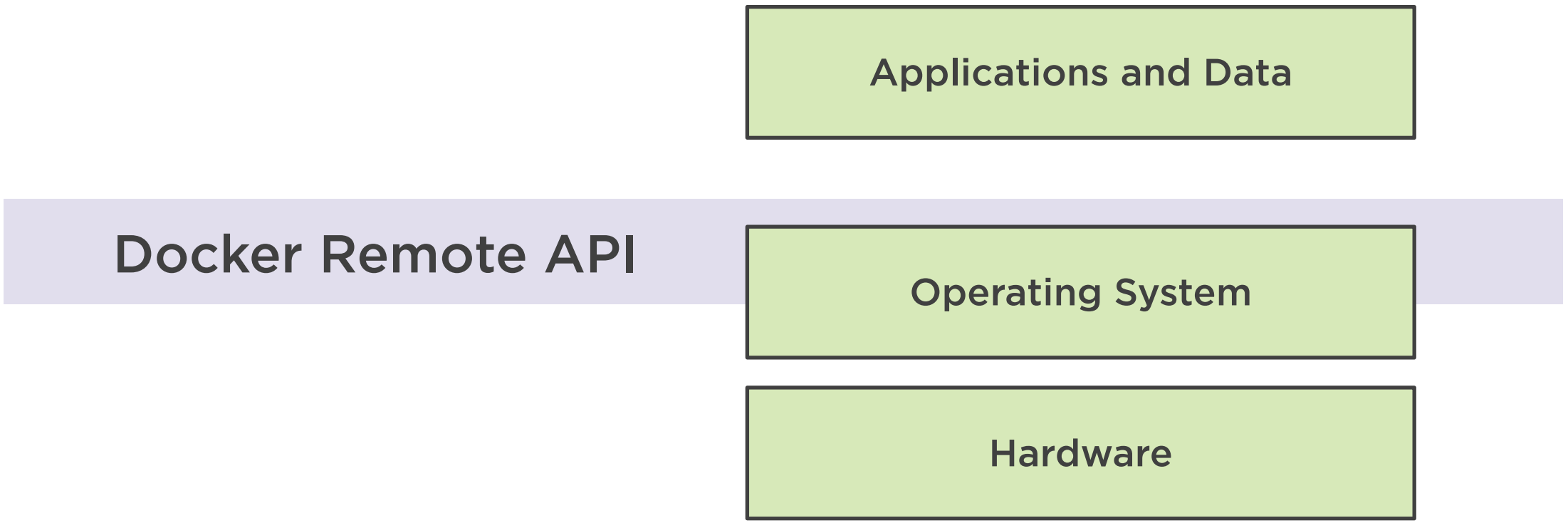

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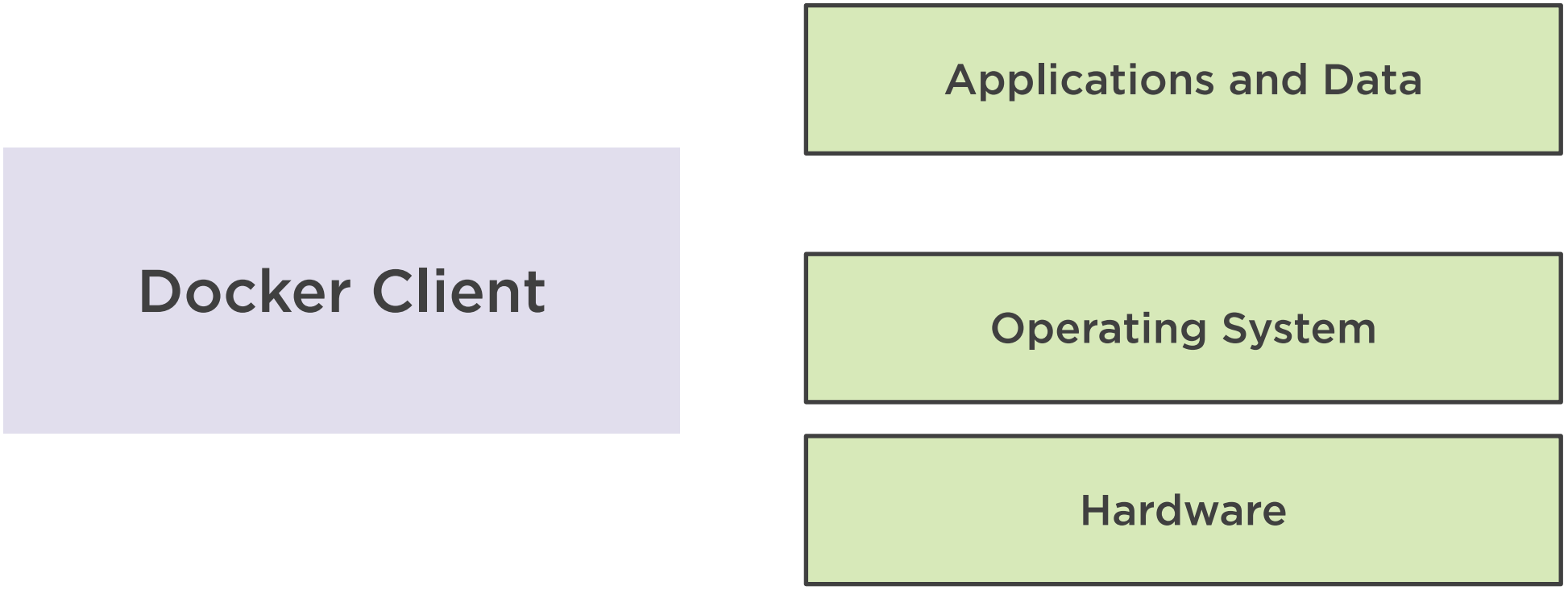

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Container

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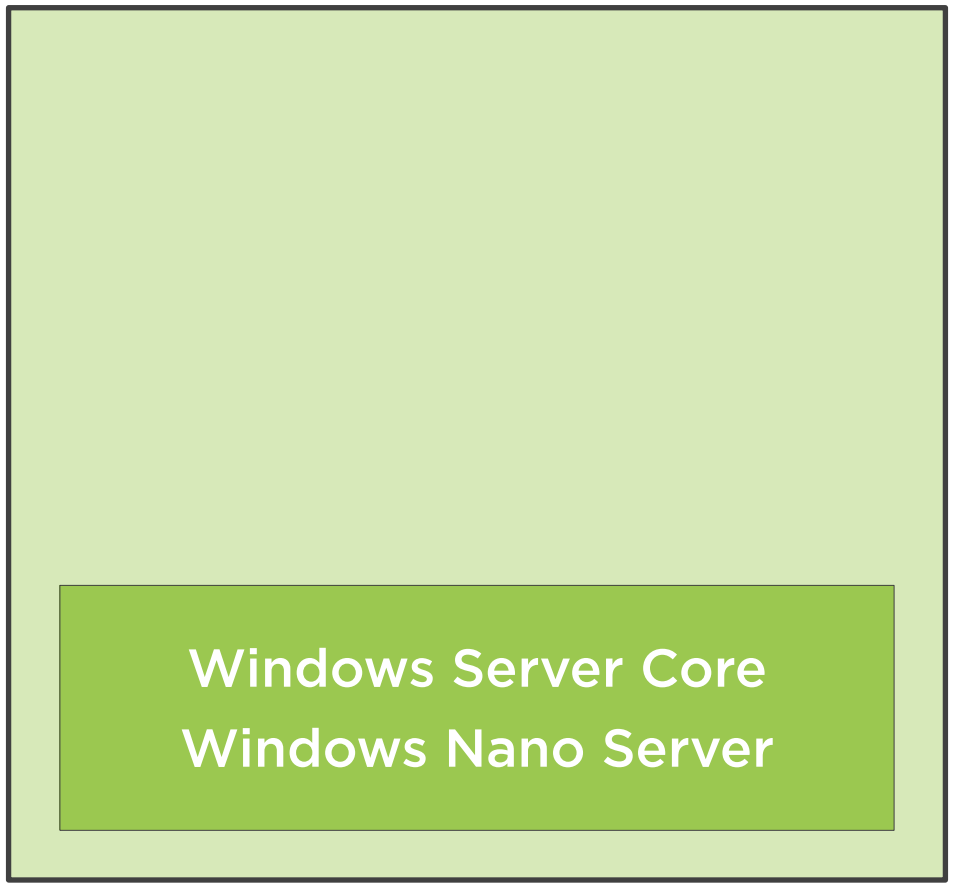

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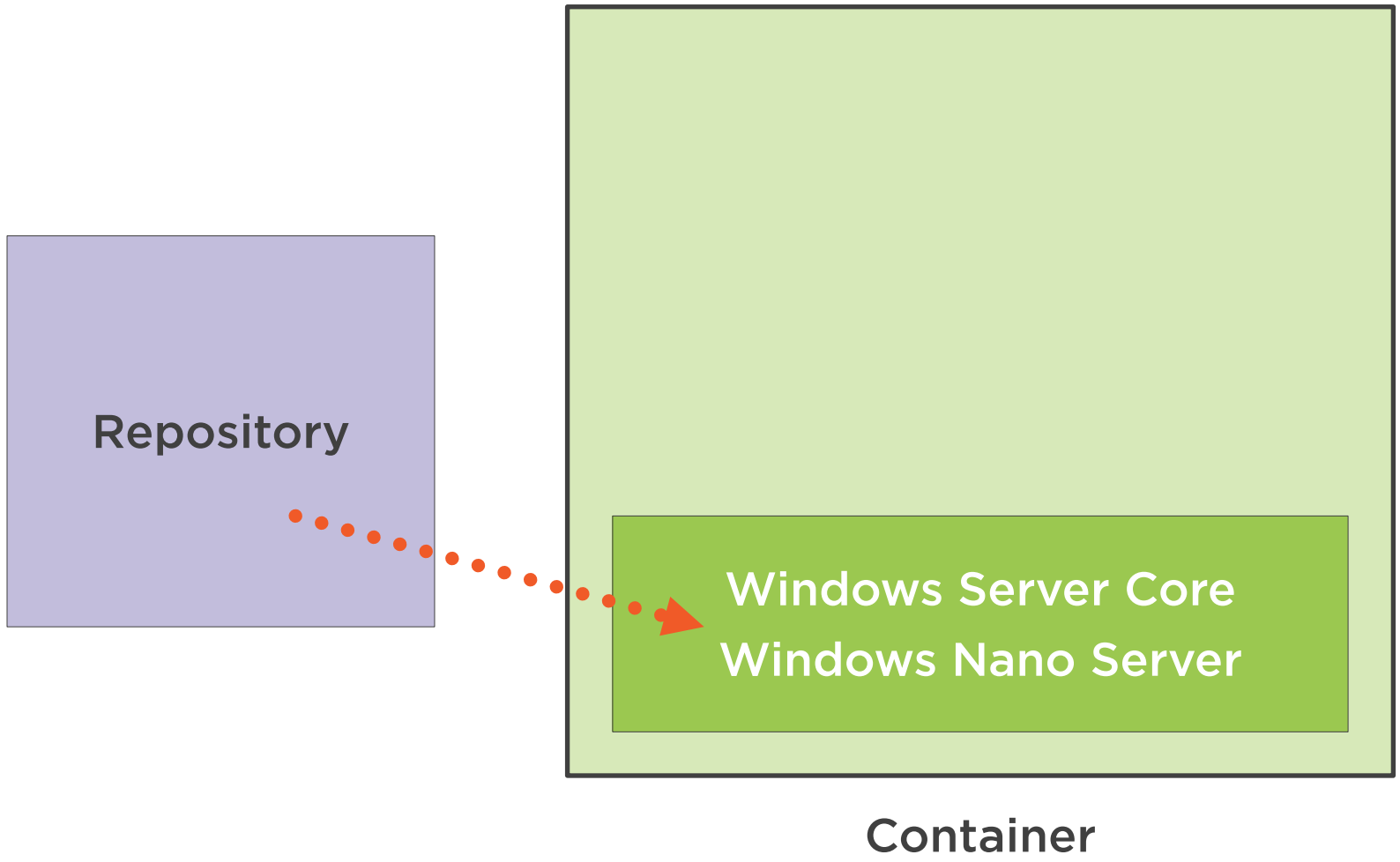

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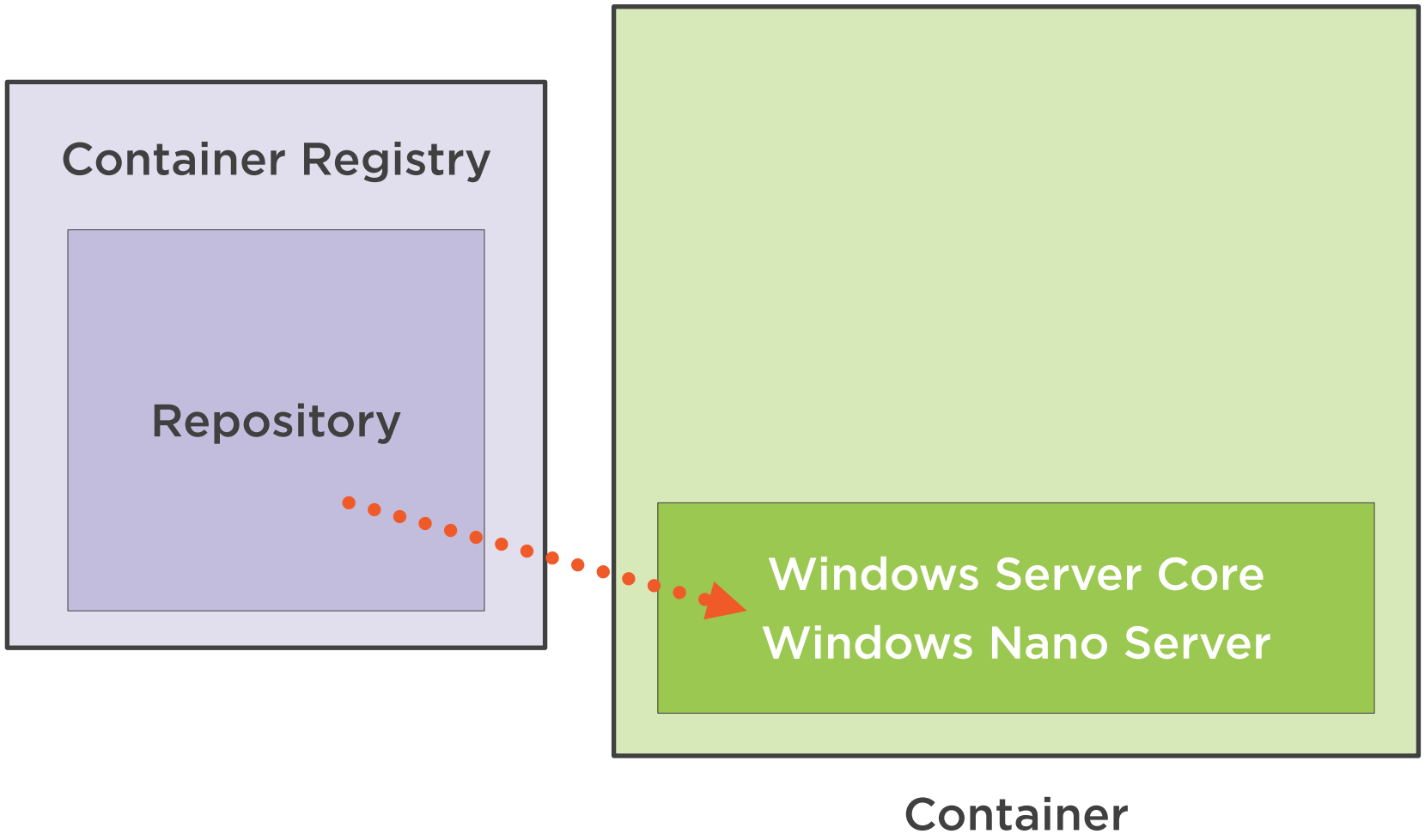

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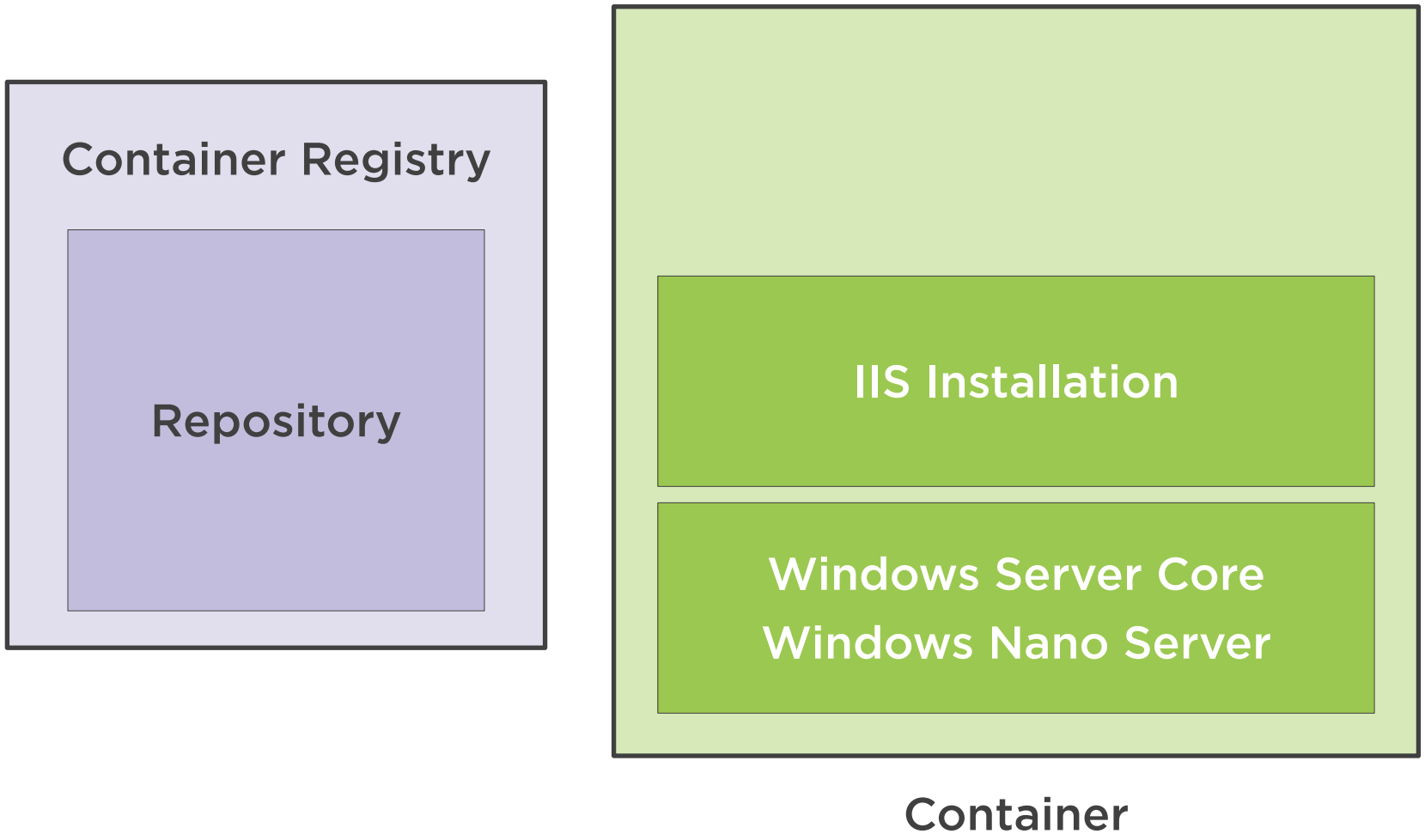

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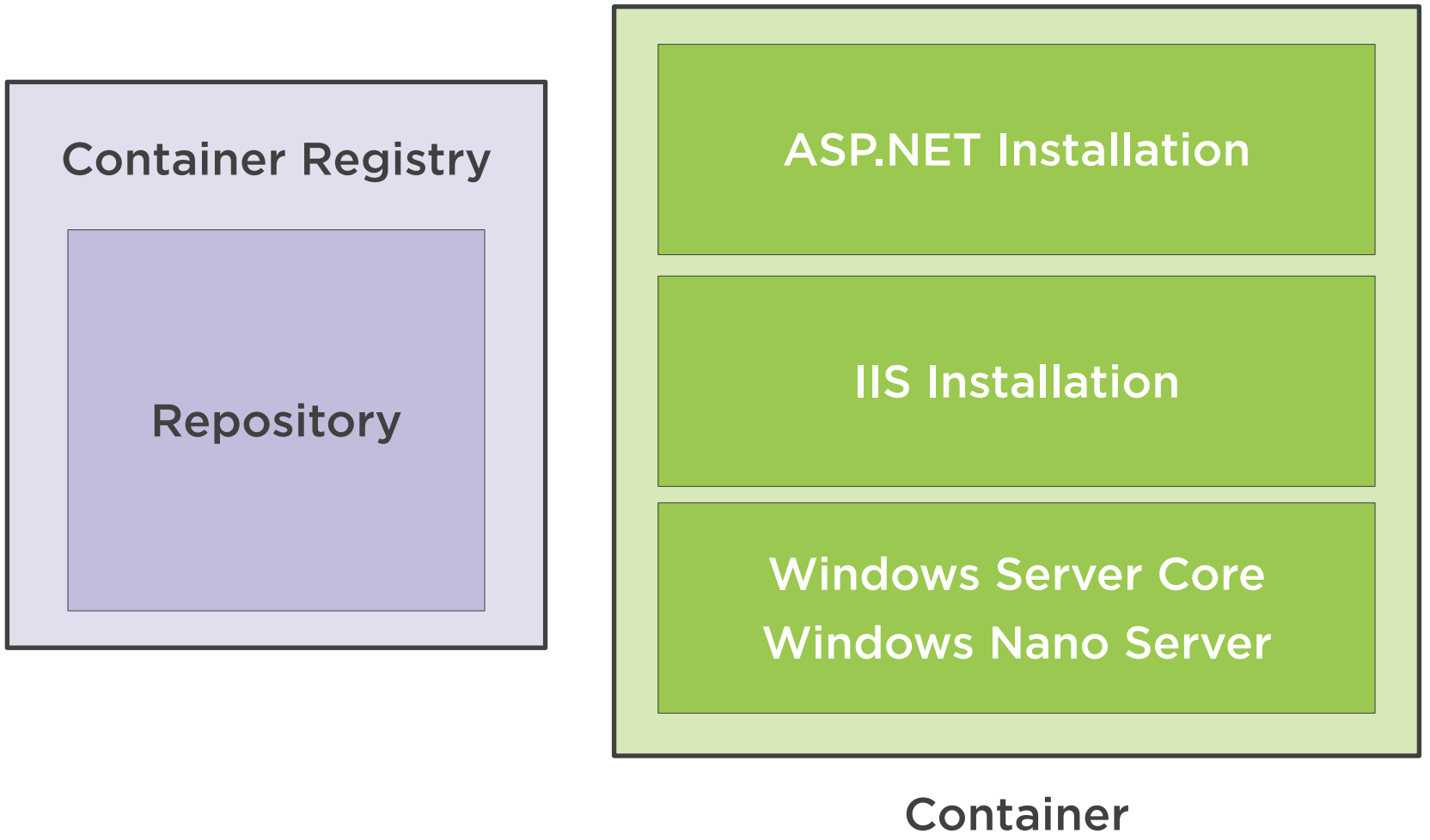

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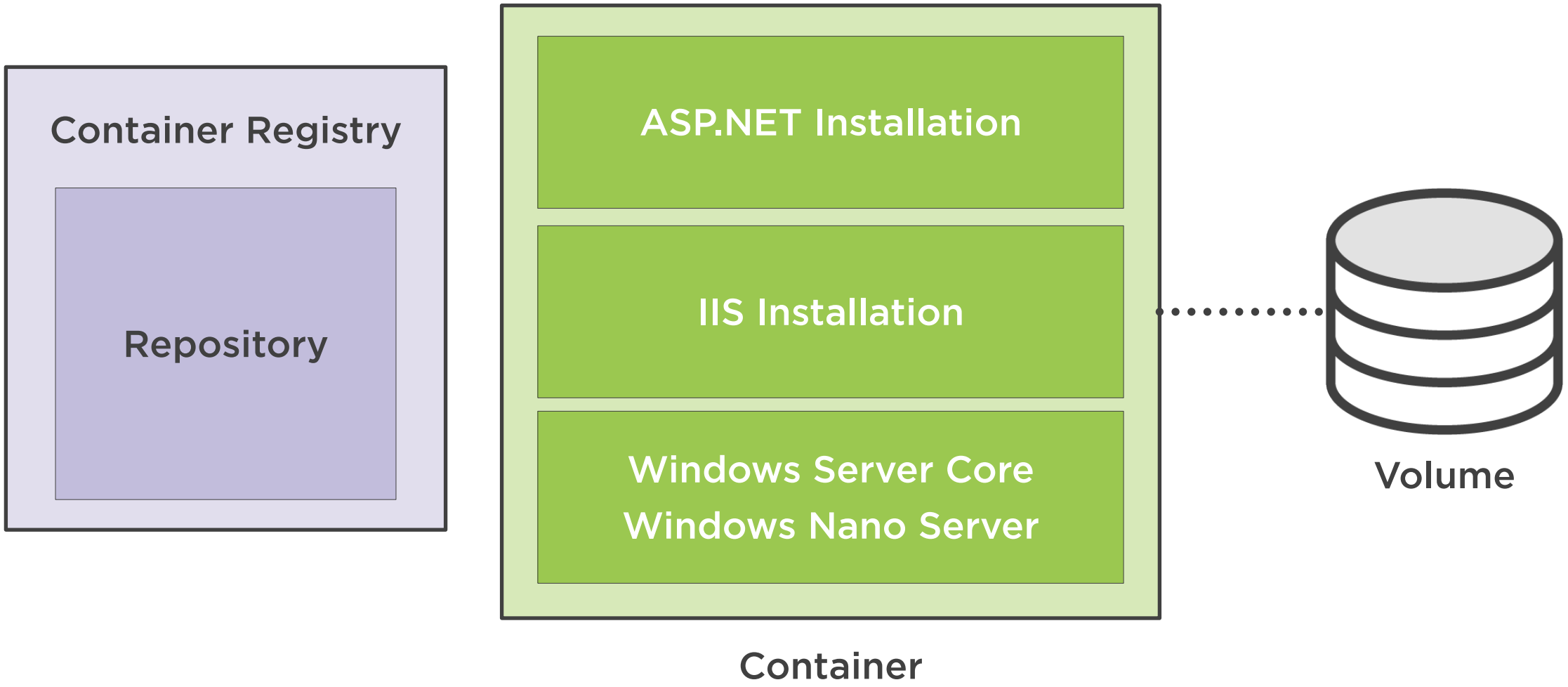

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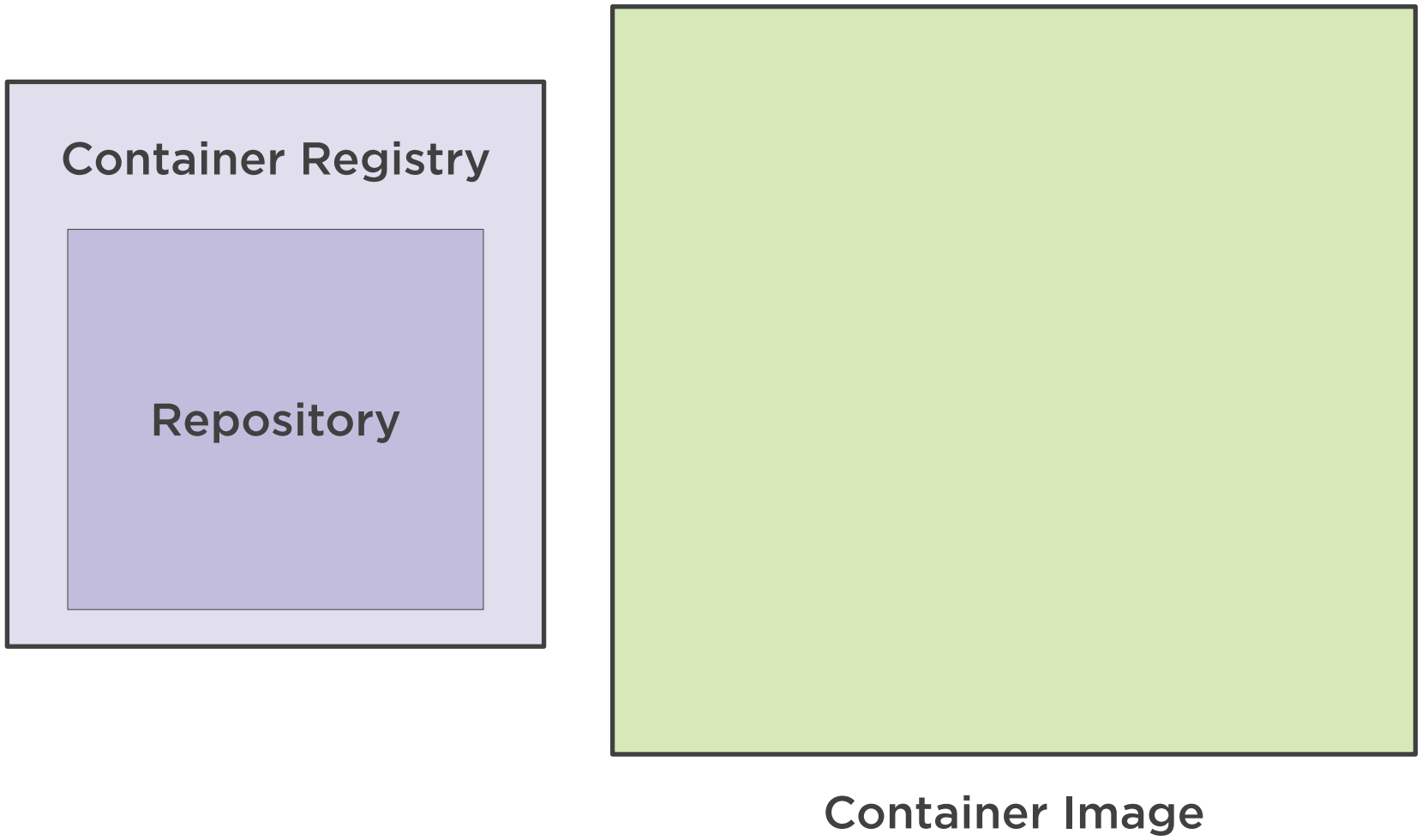

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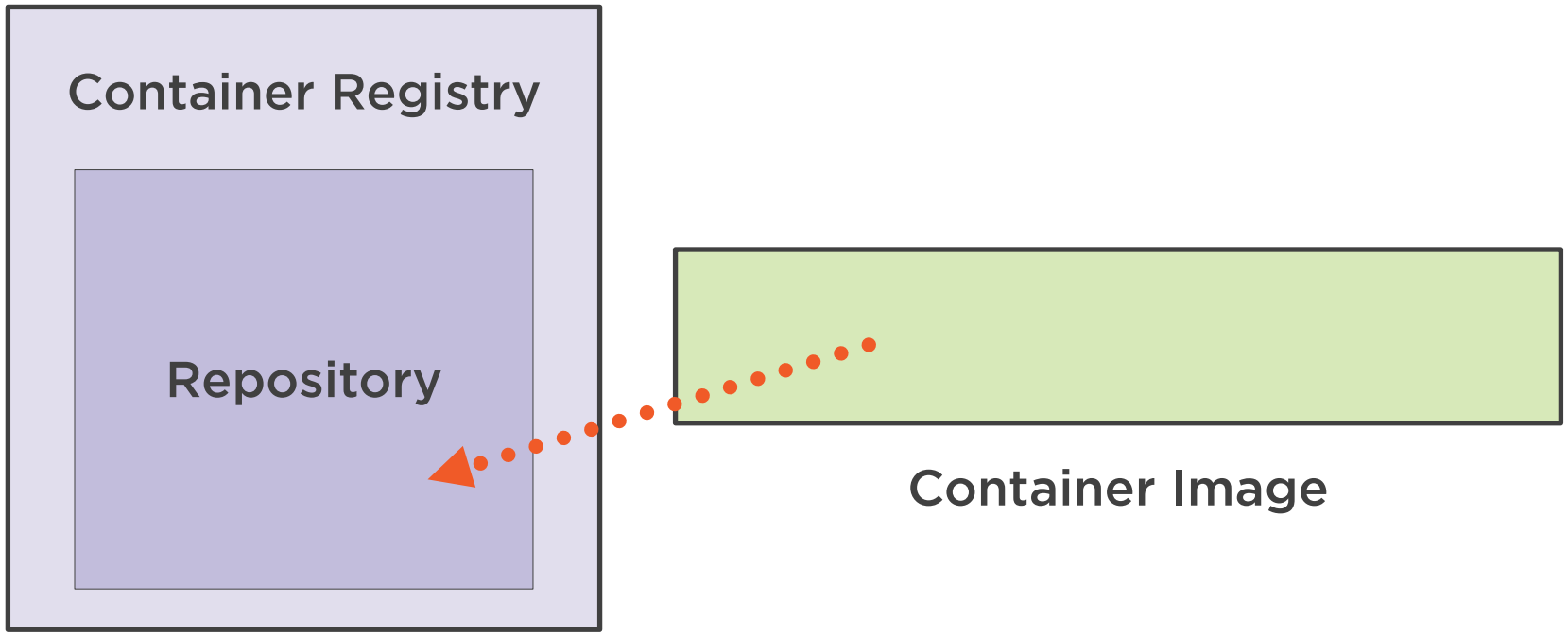

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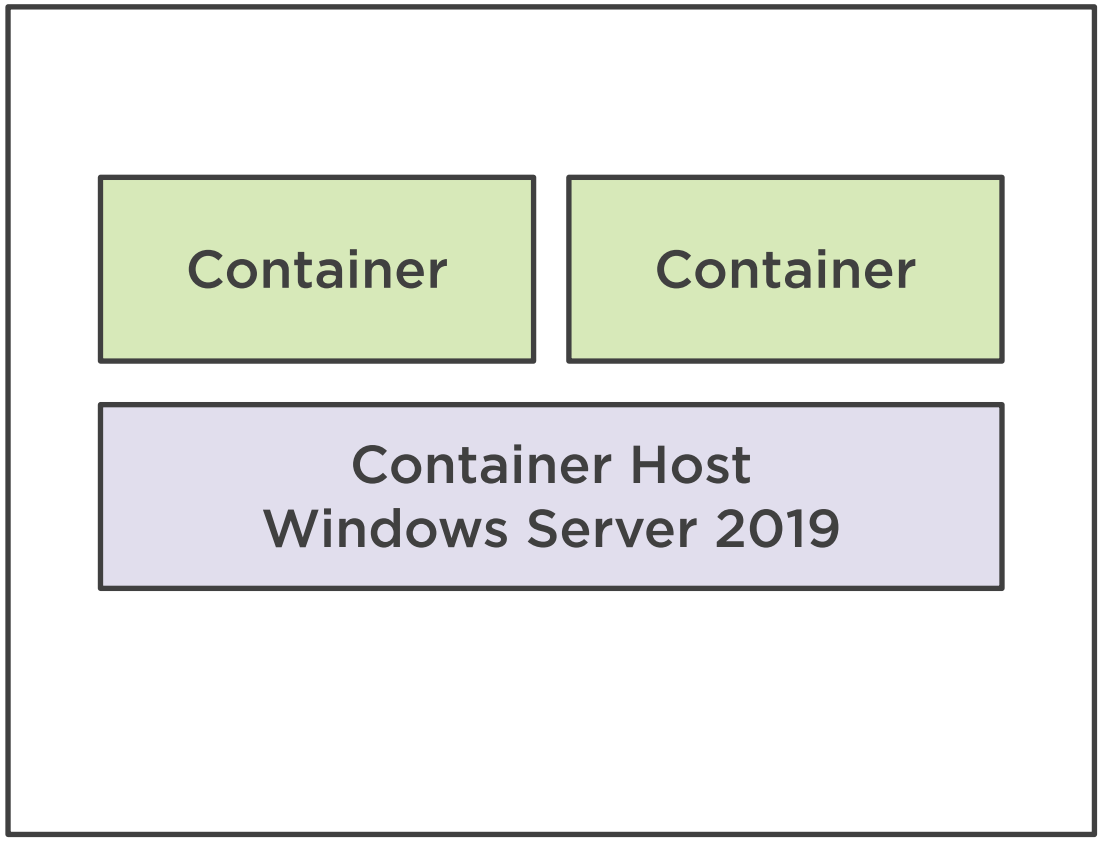

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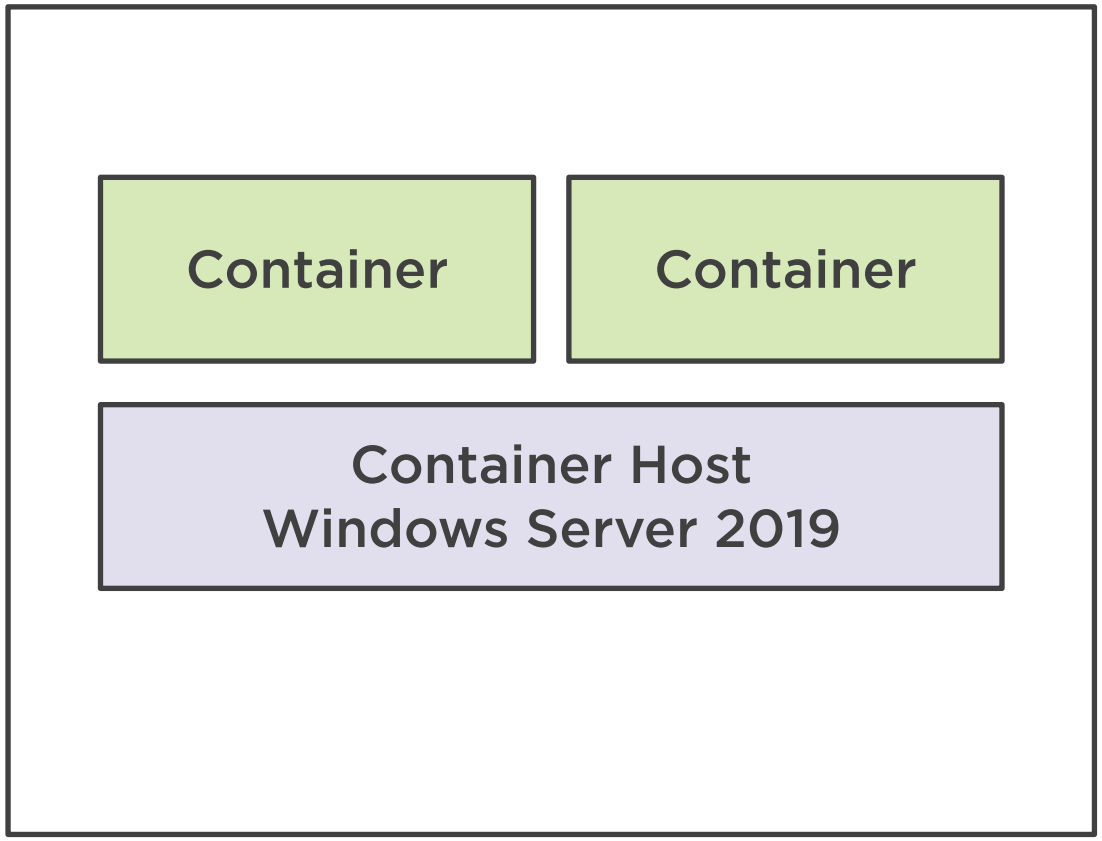

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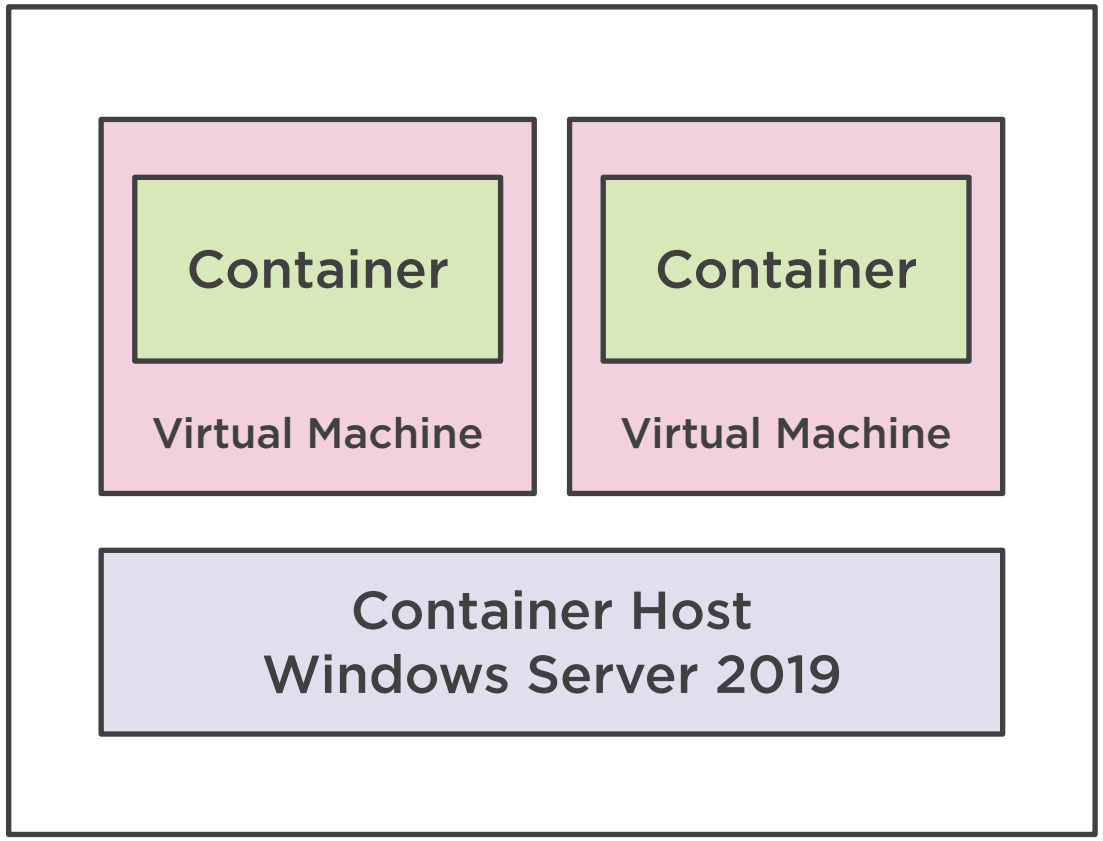

Hyper-V Container

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