

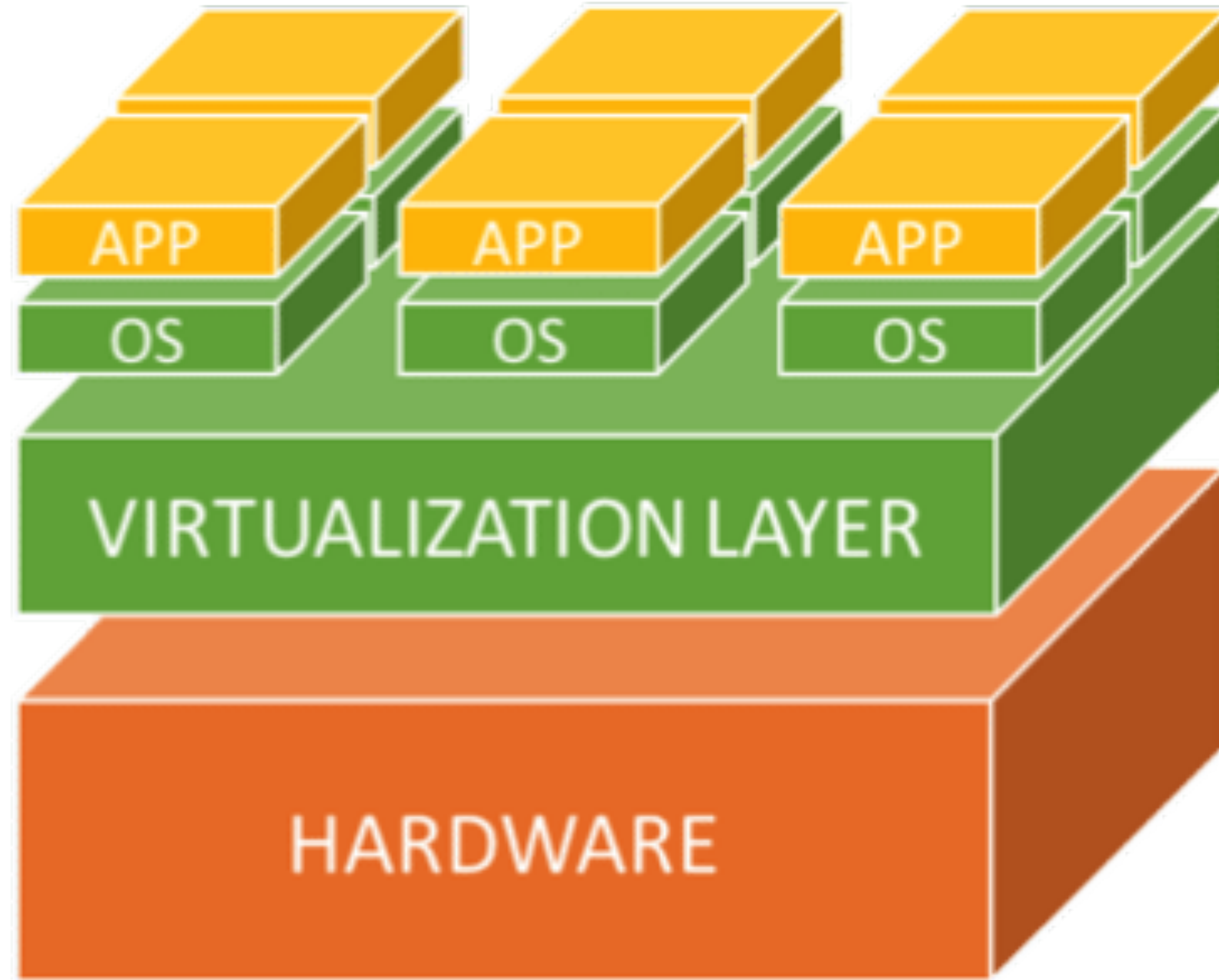
Cloud Hypervisor

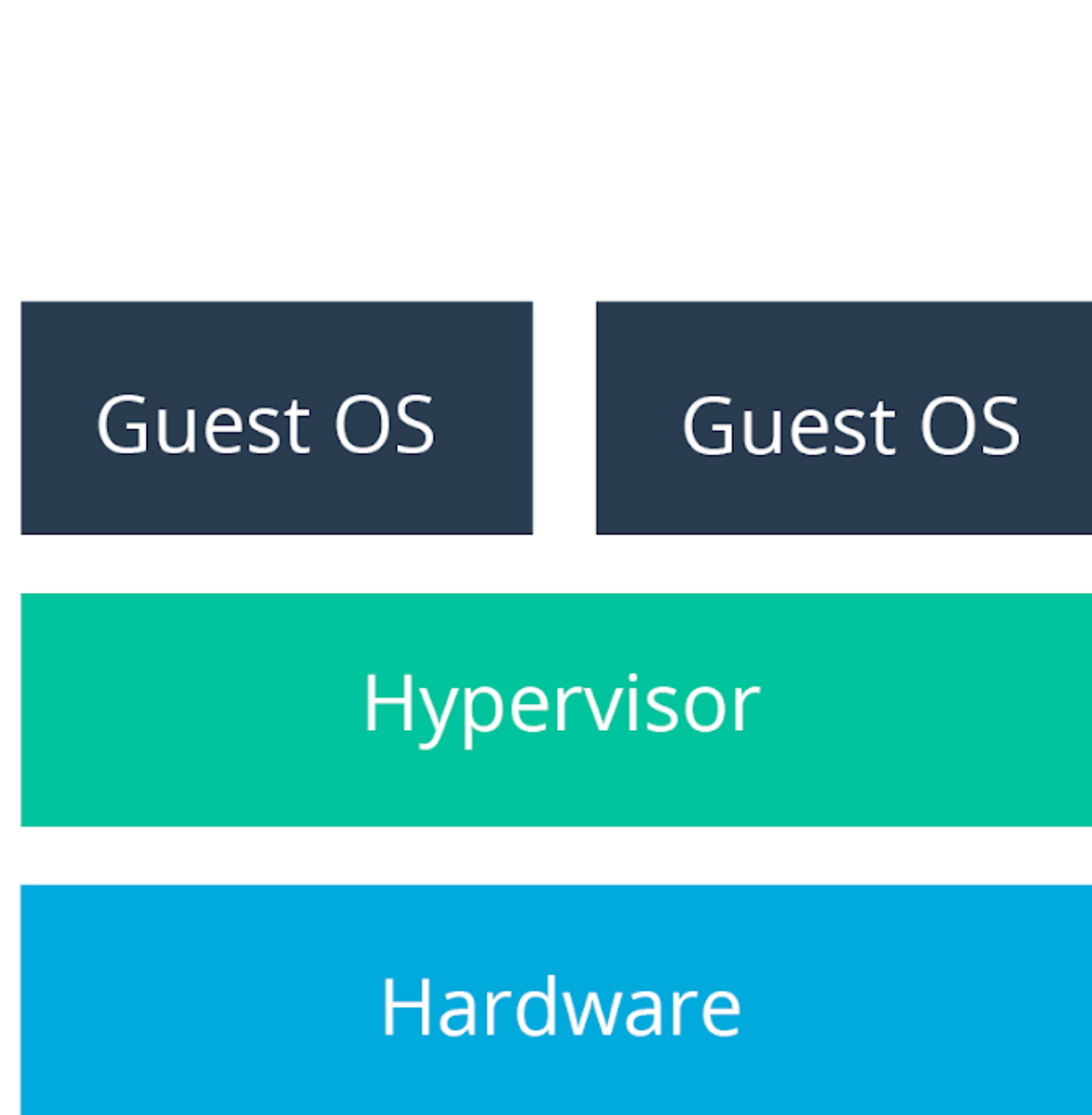
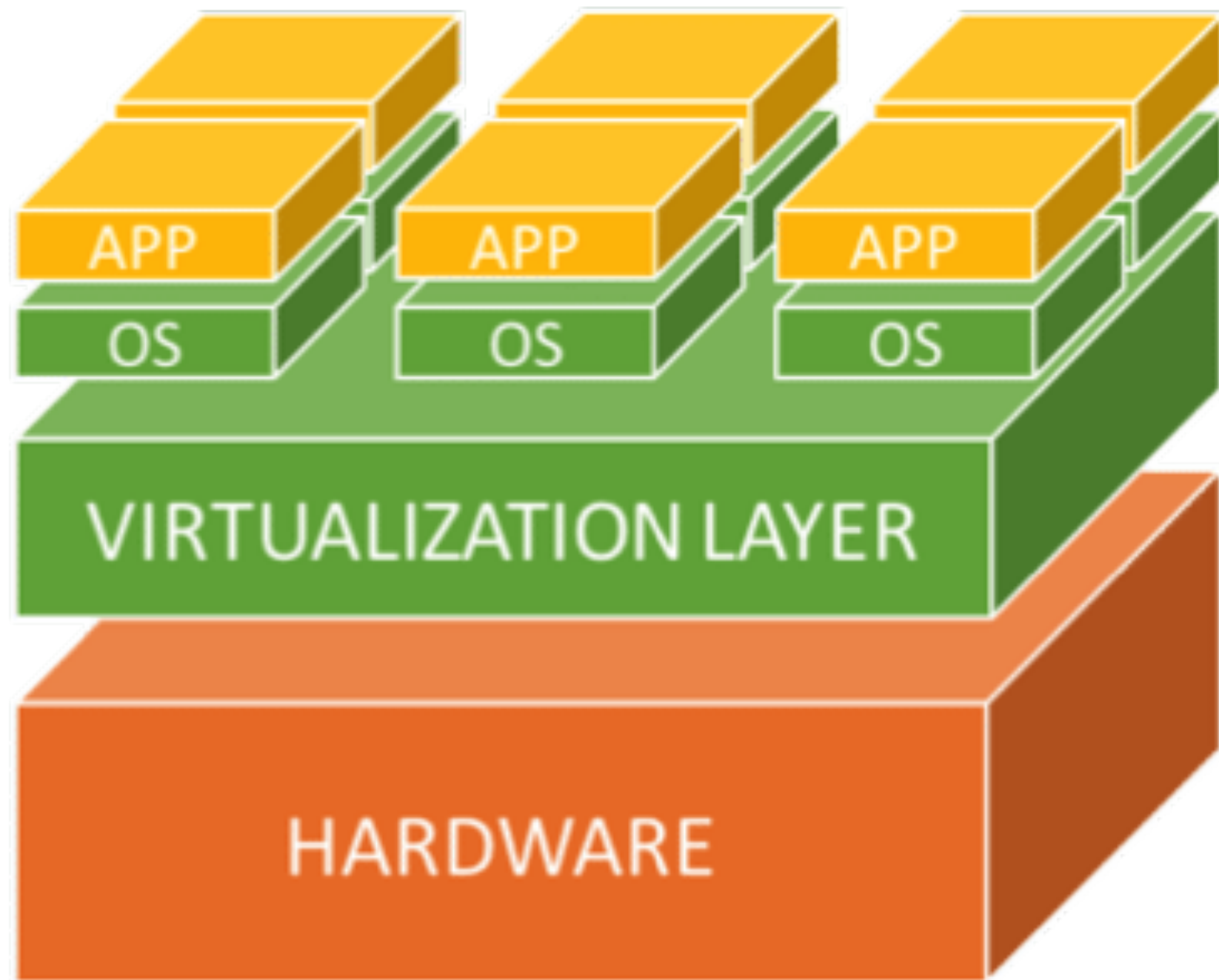
The next generation VMM written in Rust

Elias El Yandouzi & Lucas Chaloyard

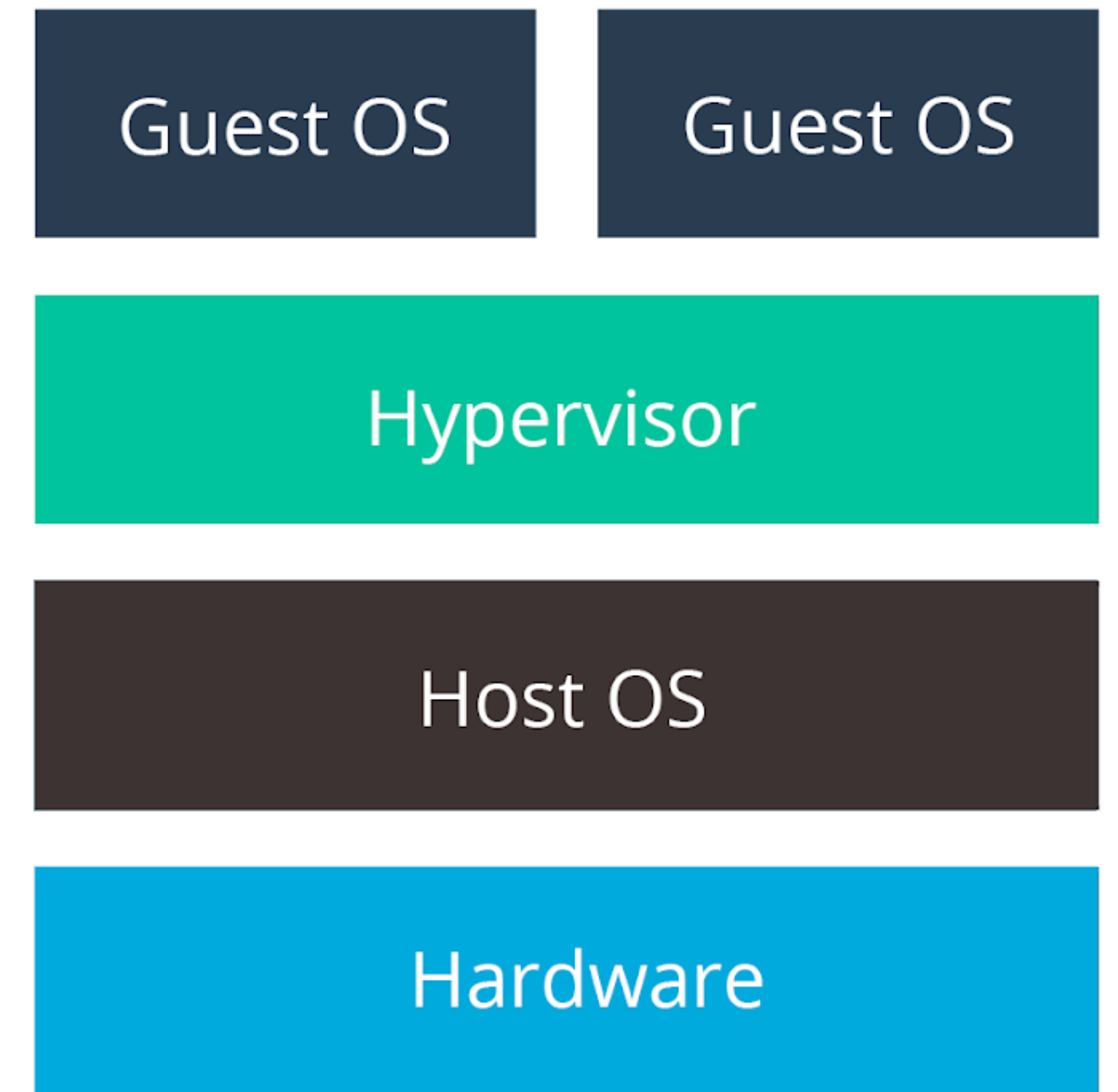
VMM

What the heck is a Virtual Machine Monitor?





TYPE 1 HYPERVISOR



TYPE 2 HYPERVISOR

Rust

Performance, Reliability, Productivity 🦀

Rust-vmmm

The pieces you need to cook your recipe



Firecracker

Amazon

Rust-vm

A set of crates to build your custom hypervisor



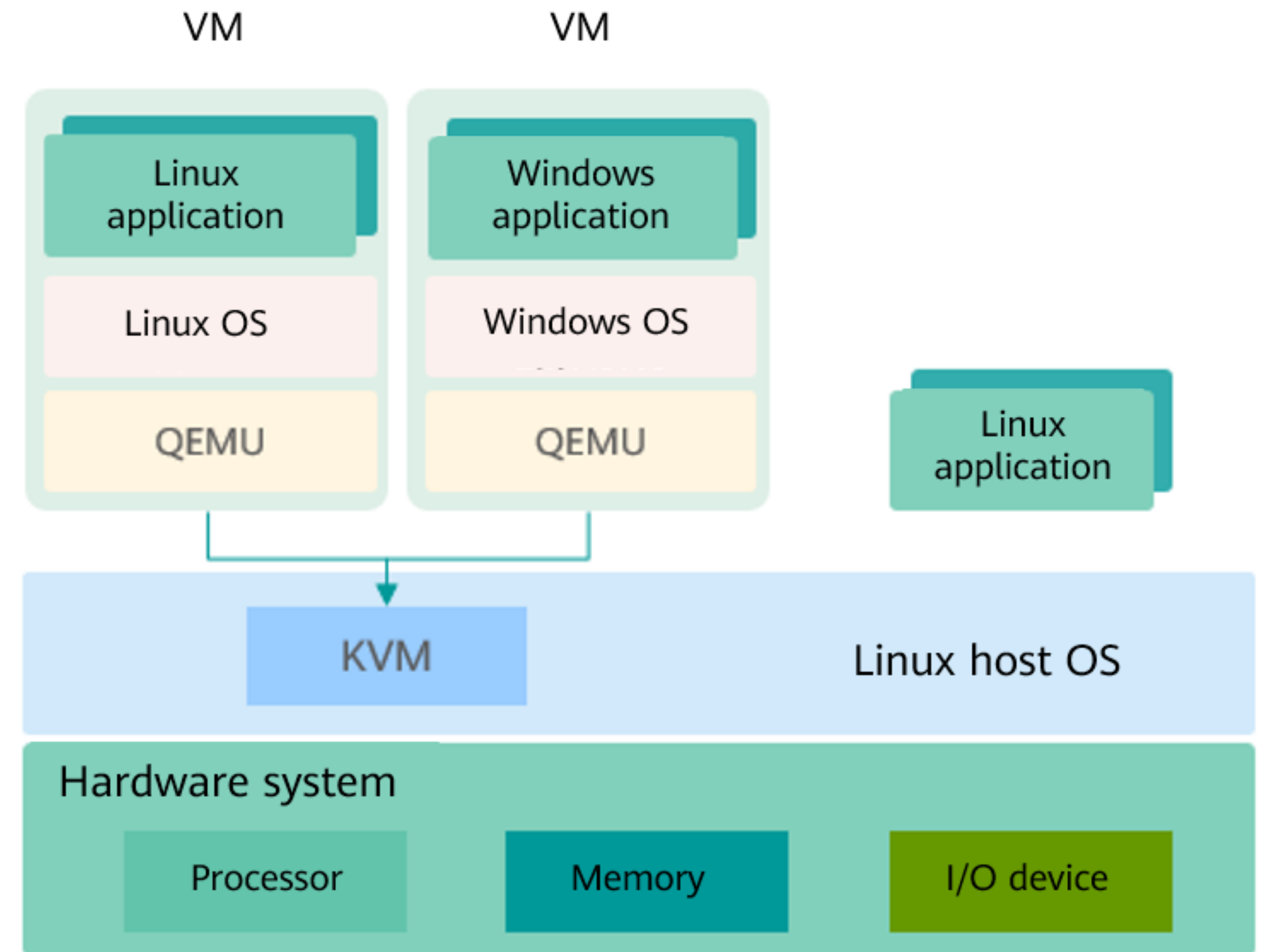
Google

KVM

Did you just say Kernel-based Virtual Machine?

KVM Architecture

Linux extension to manage virtual machines





QEMU

An open-source machine &
userspace emulator and virtualizer

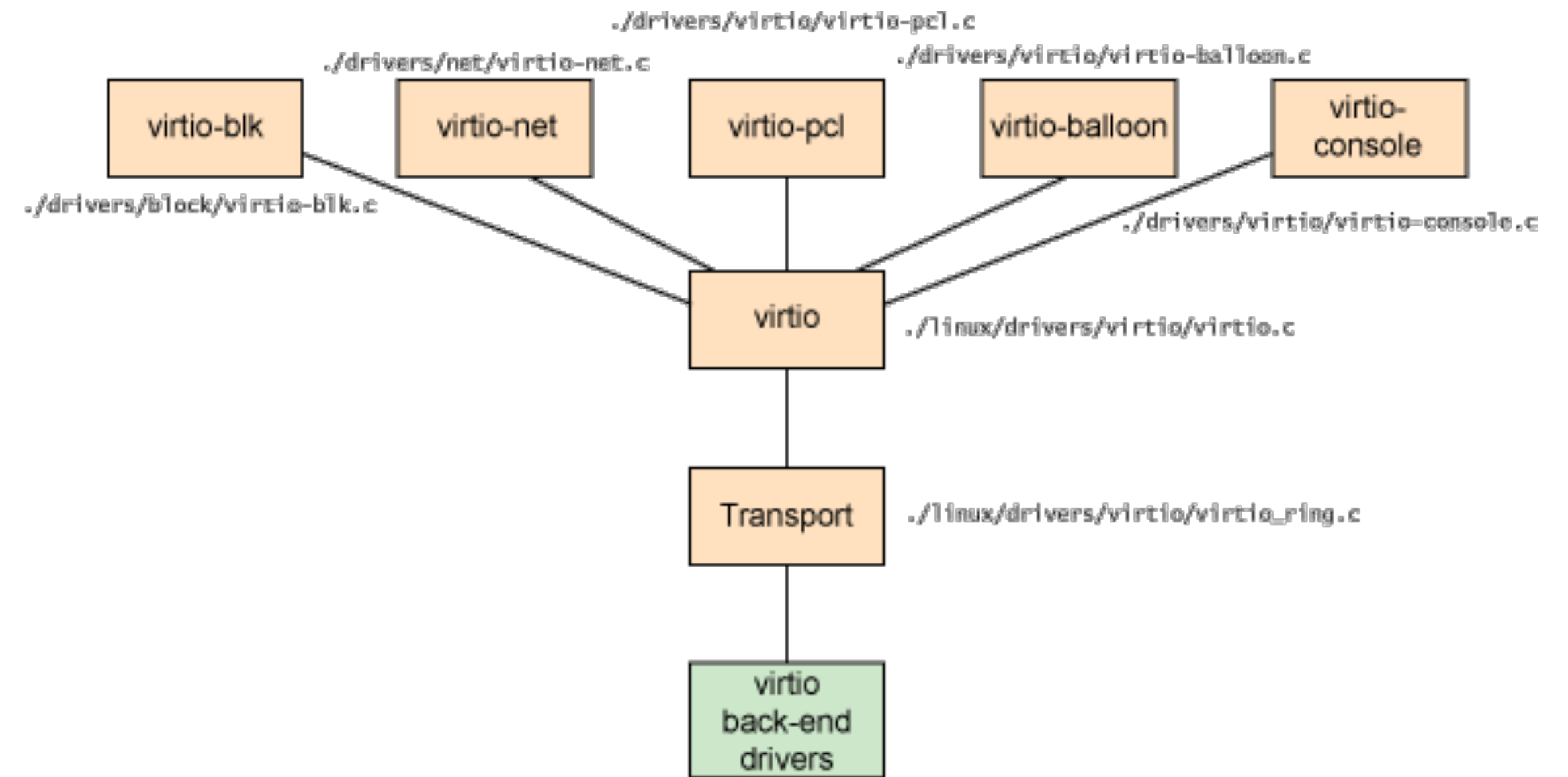
VirtIO

I/O framework for paravirtualized devices

VirtIO Framework

Diving a bit into the details

- Multiple devices
- A simple but efficient mean of communication
- Hypervisor agnostic



Cloud-hypervisor

Secure, Fast, Cross platform, Live migration