

Infrastructure Management

... in VFX!

Andre Prado, August 6th 2020

Agenda

- Introduction
- Creating and managing our infrastructure with Ansible

Introduction

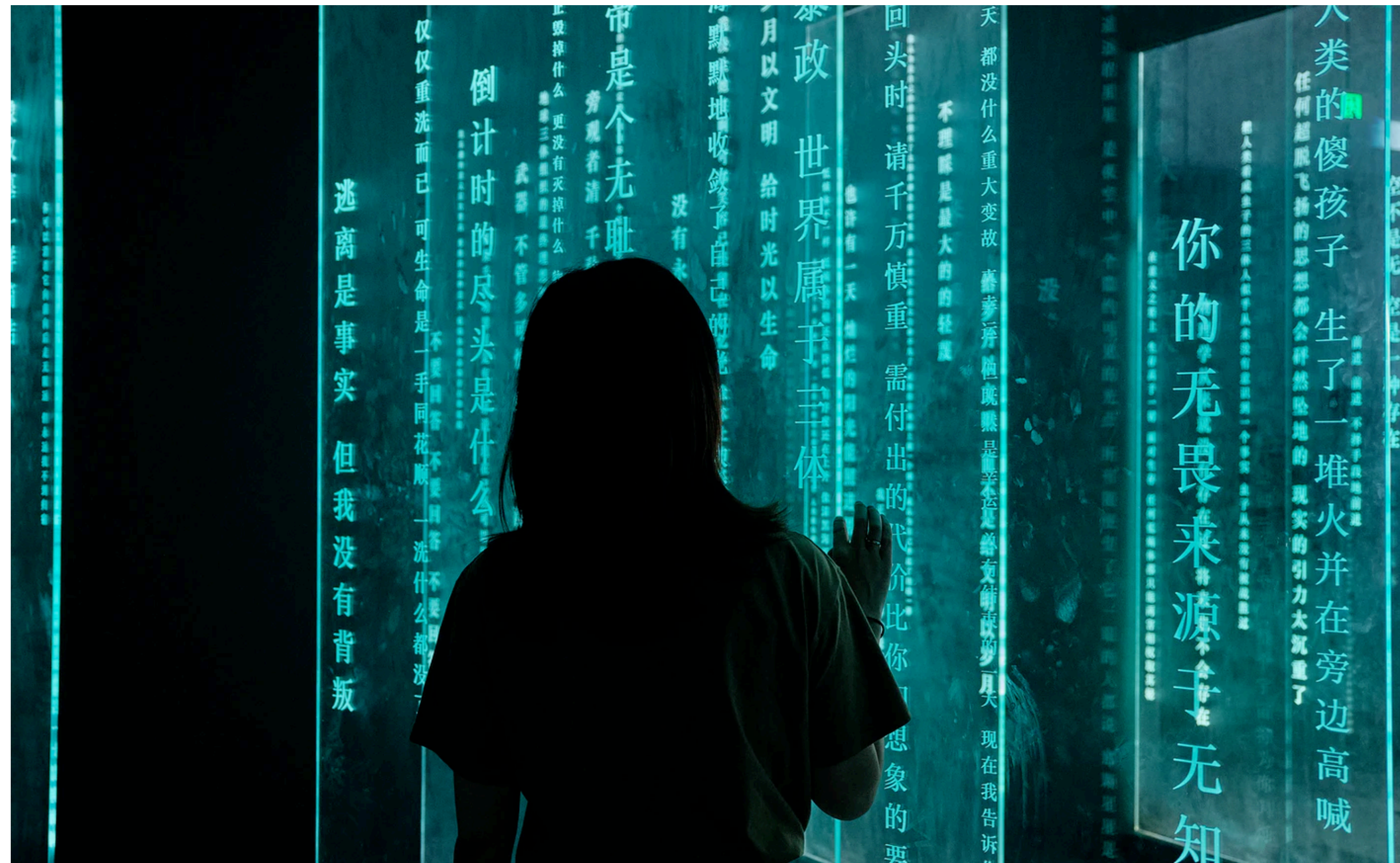
Me!

- Close to 10 years developing software (and hardware!)
- Close to five years of experience leading software teams in VFX
 - All in Core Pipeline
- Usually helping to bridge **Developers** and **Operations**
 - DevOps !
- You can find me in twitter [@andrecasp](https://twitter.com/andrecasp)



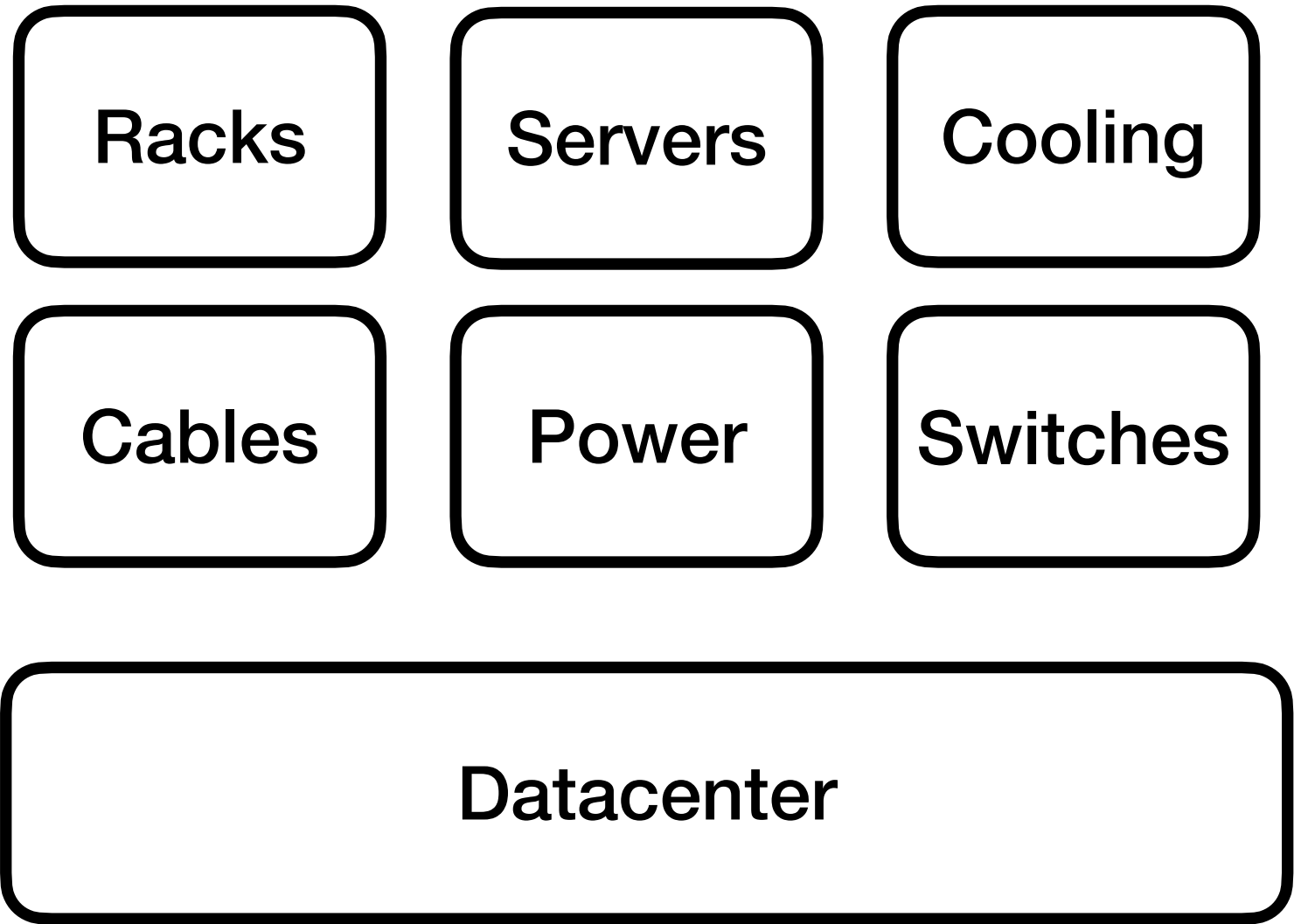
Infrastructure

- What is it ?
- .. A LOT of things!



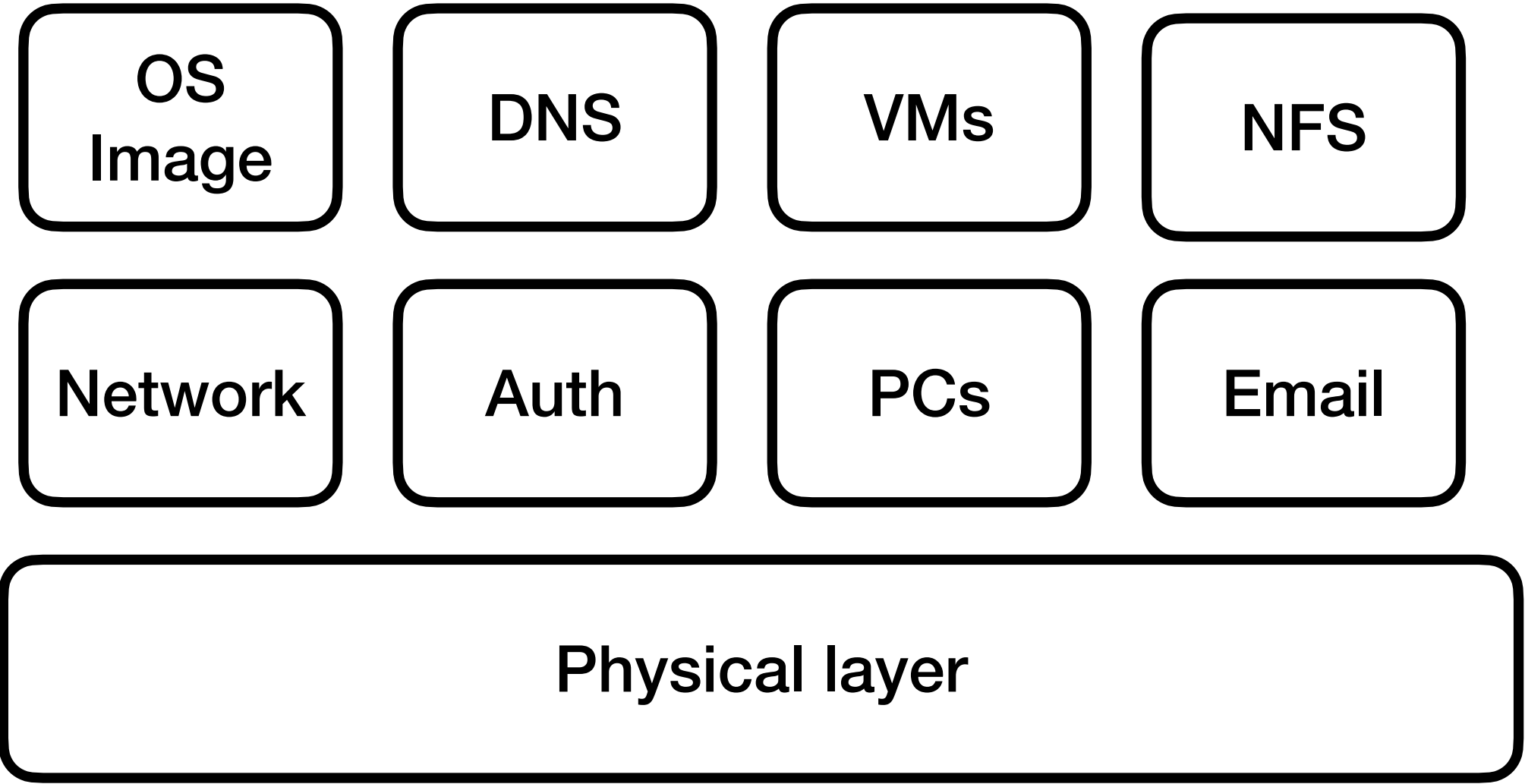
Infrastructure

Level 0 - Physical



Infrastructure

Level 1 - Core



Usually all you need to run your application



hello.py

OS Image

Auth

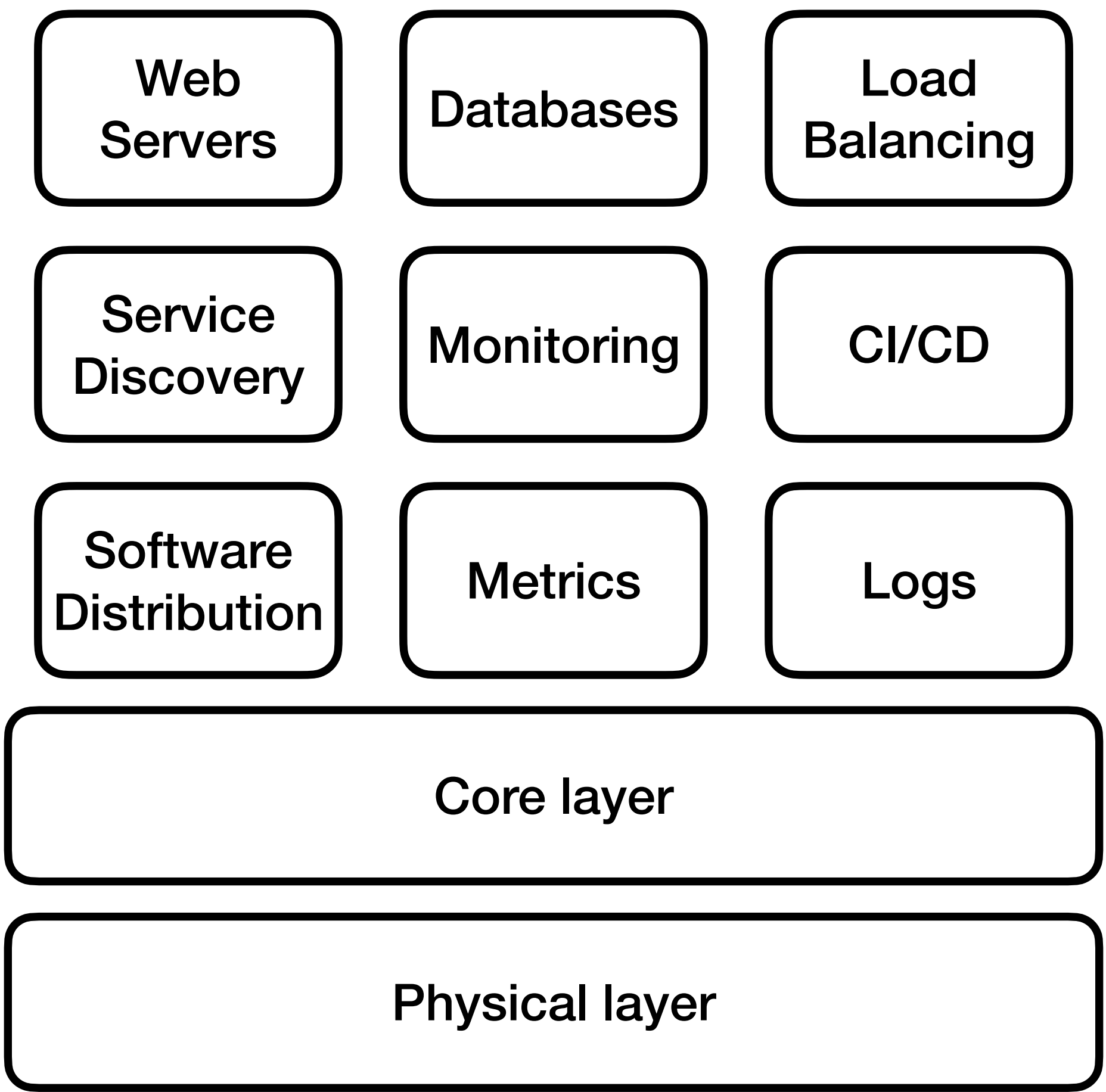
Network

DNS

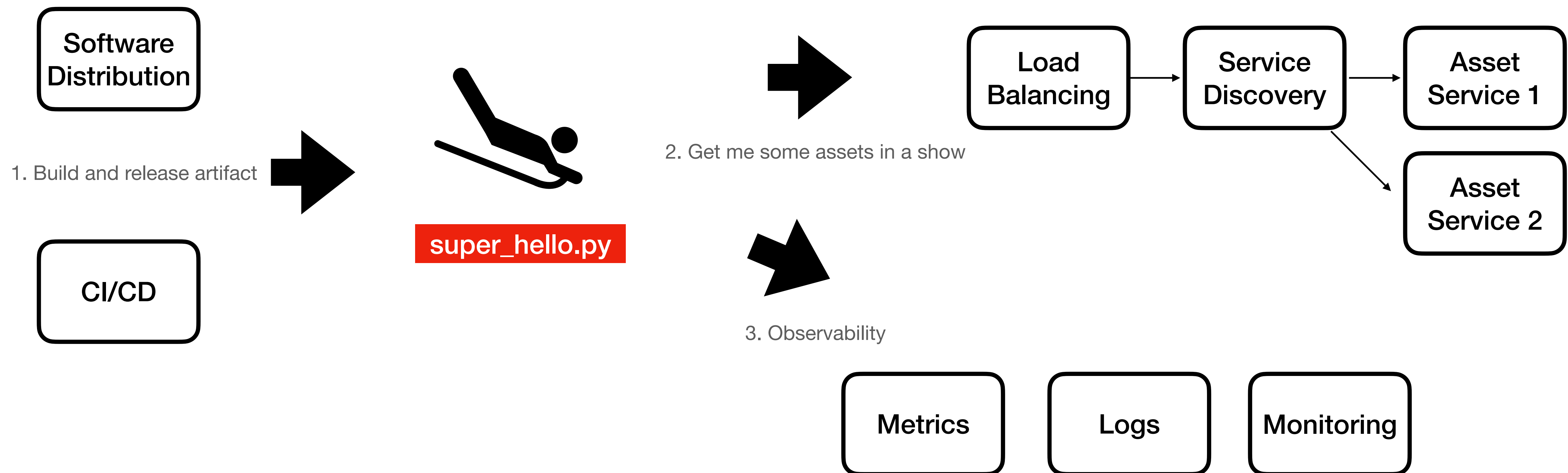
NFS

Infrastructure

Level 2 - Platform

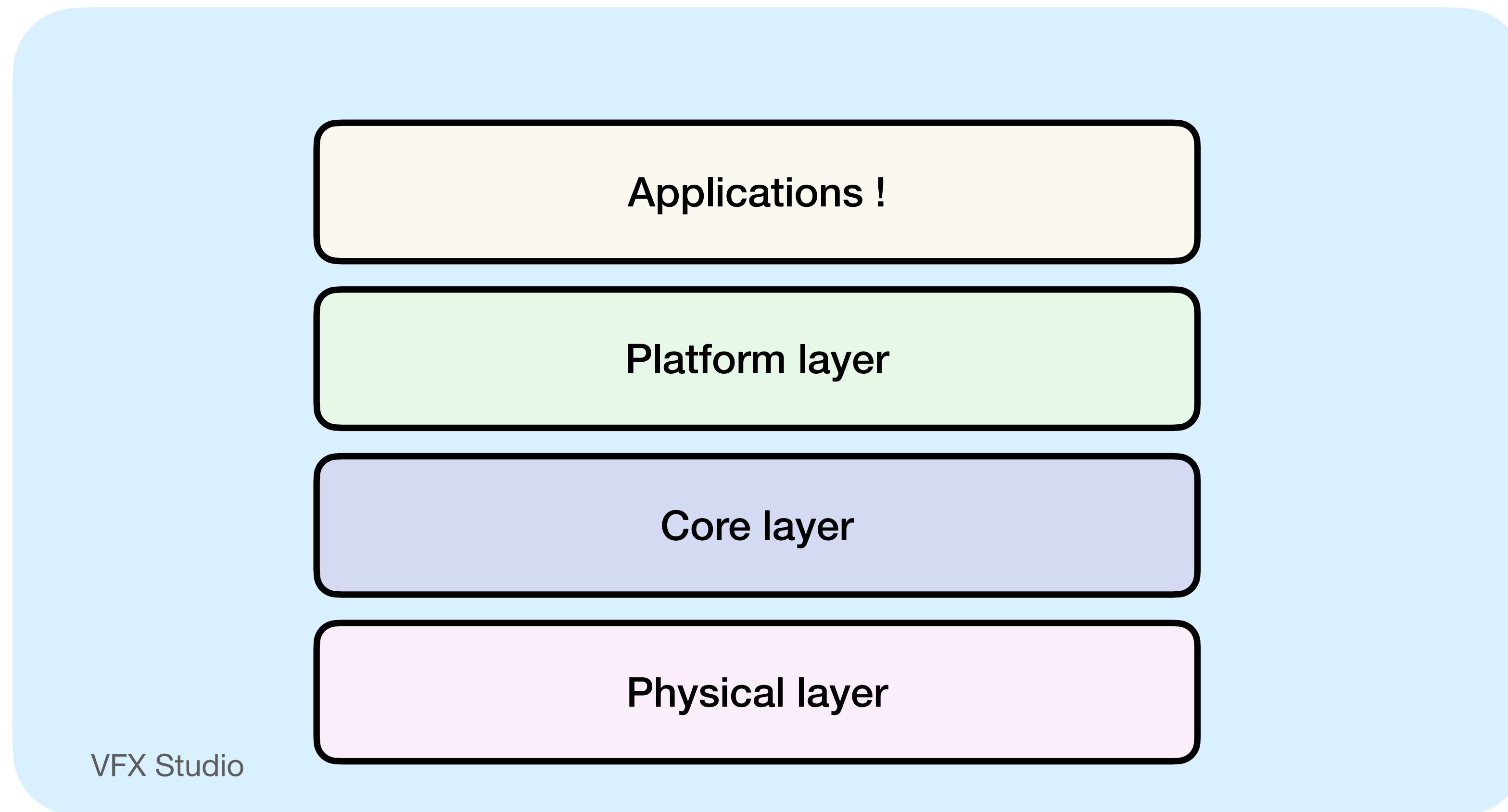


Usually all you need to scale your application



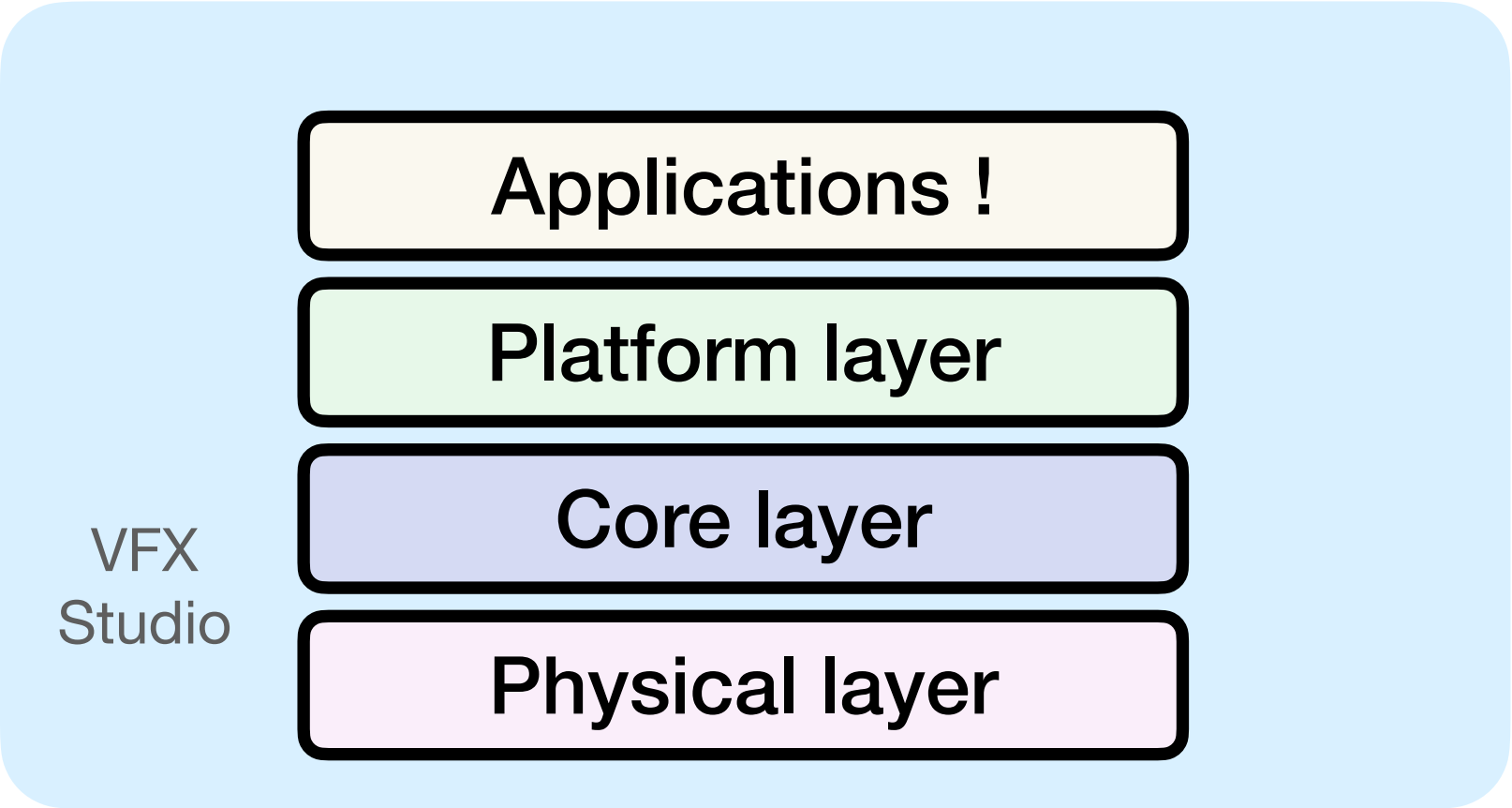
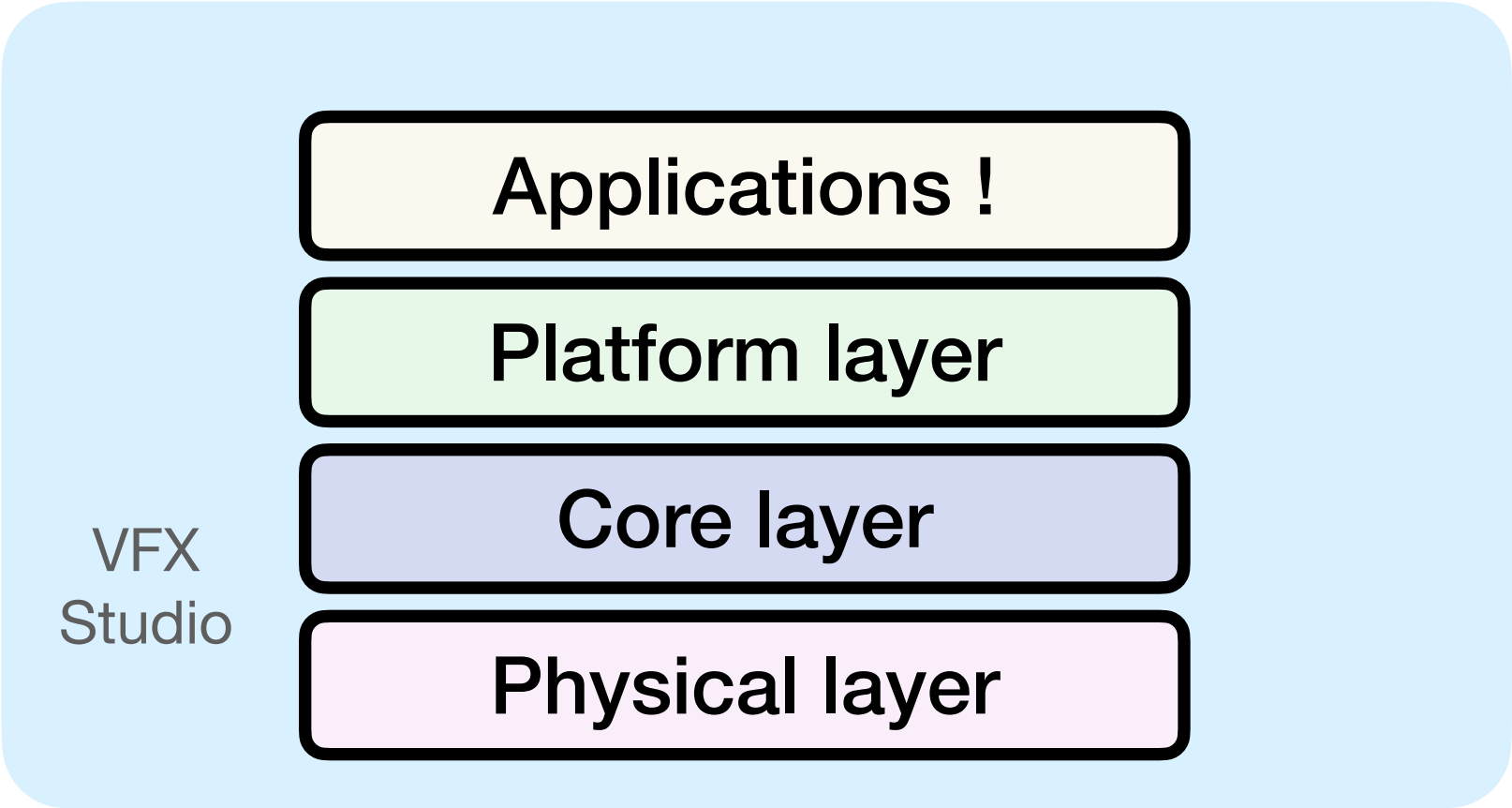
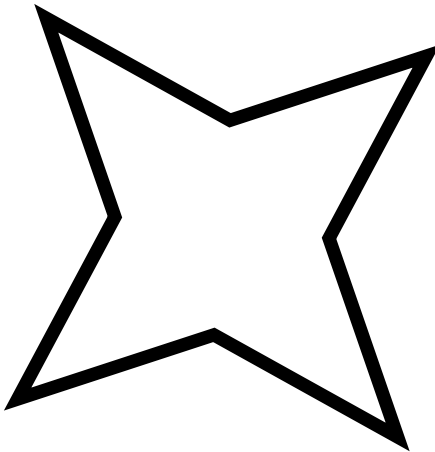
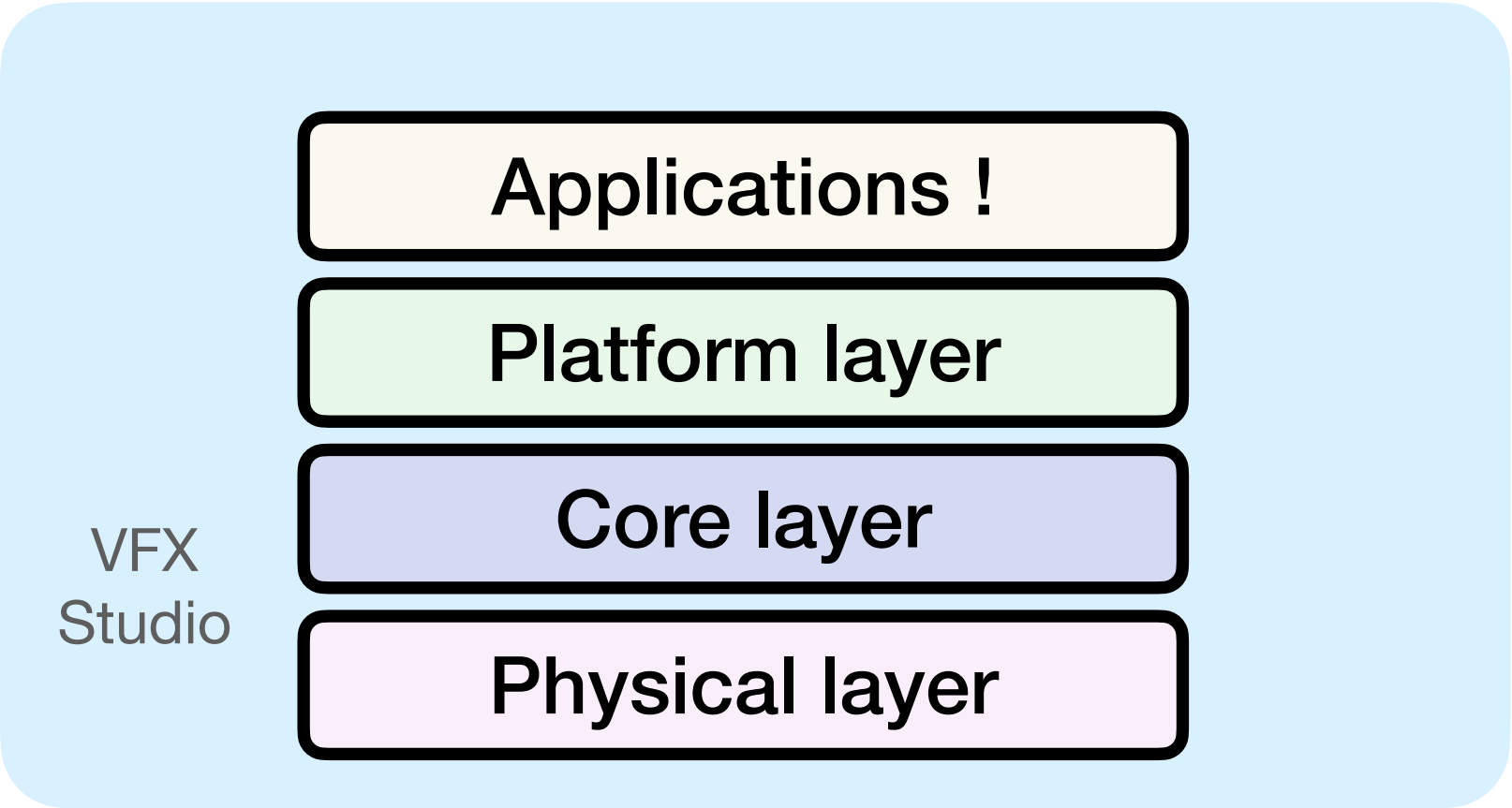
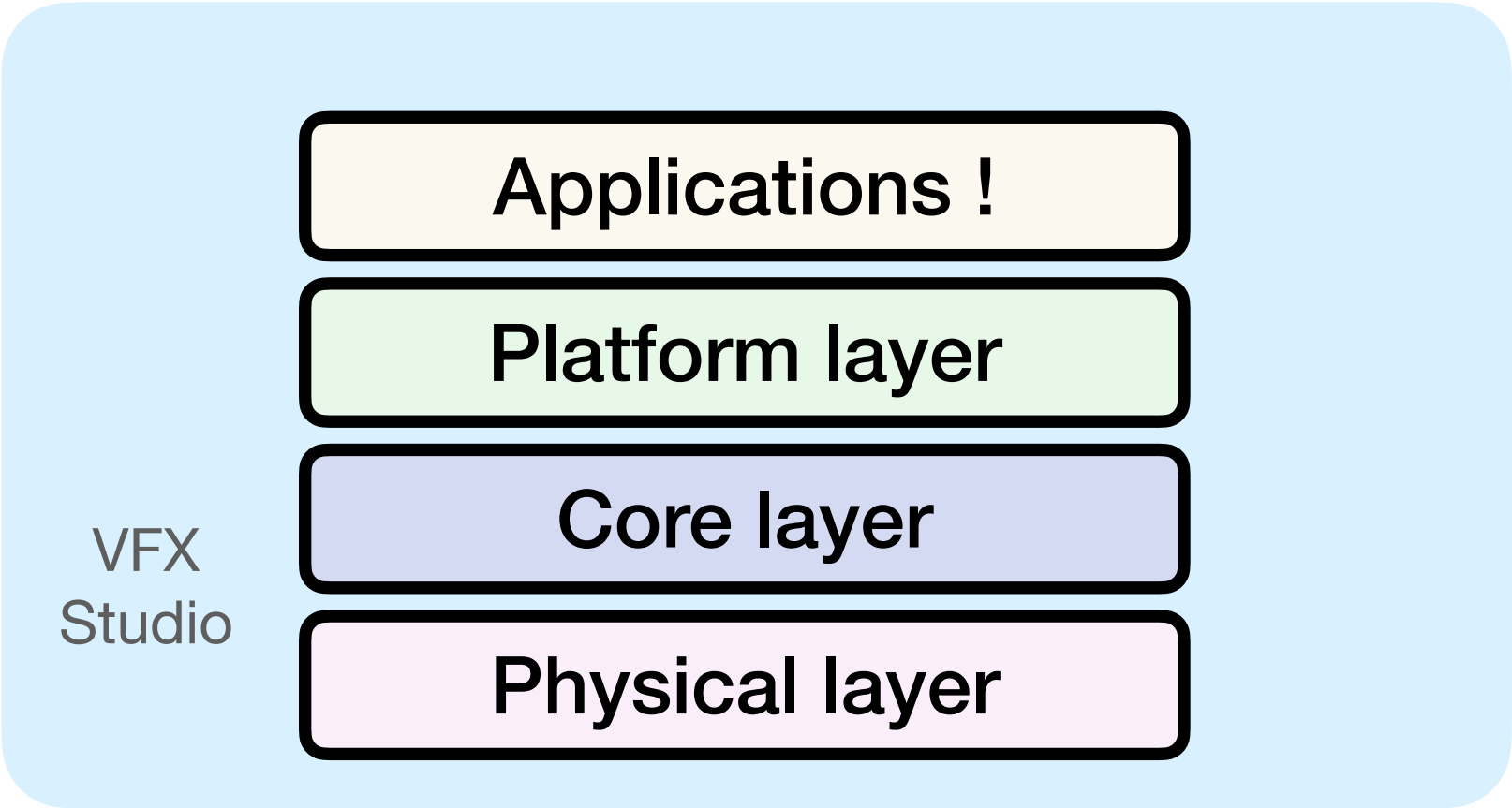
Infrastructure

Simple!



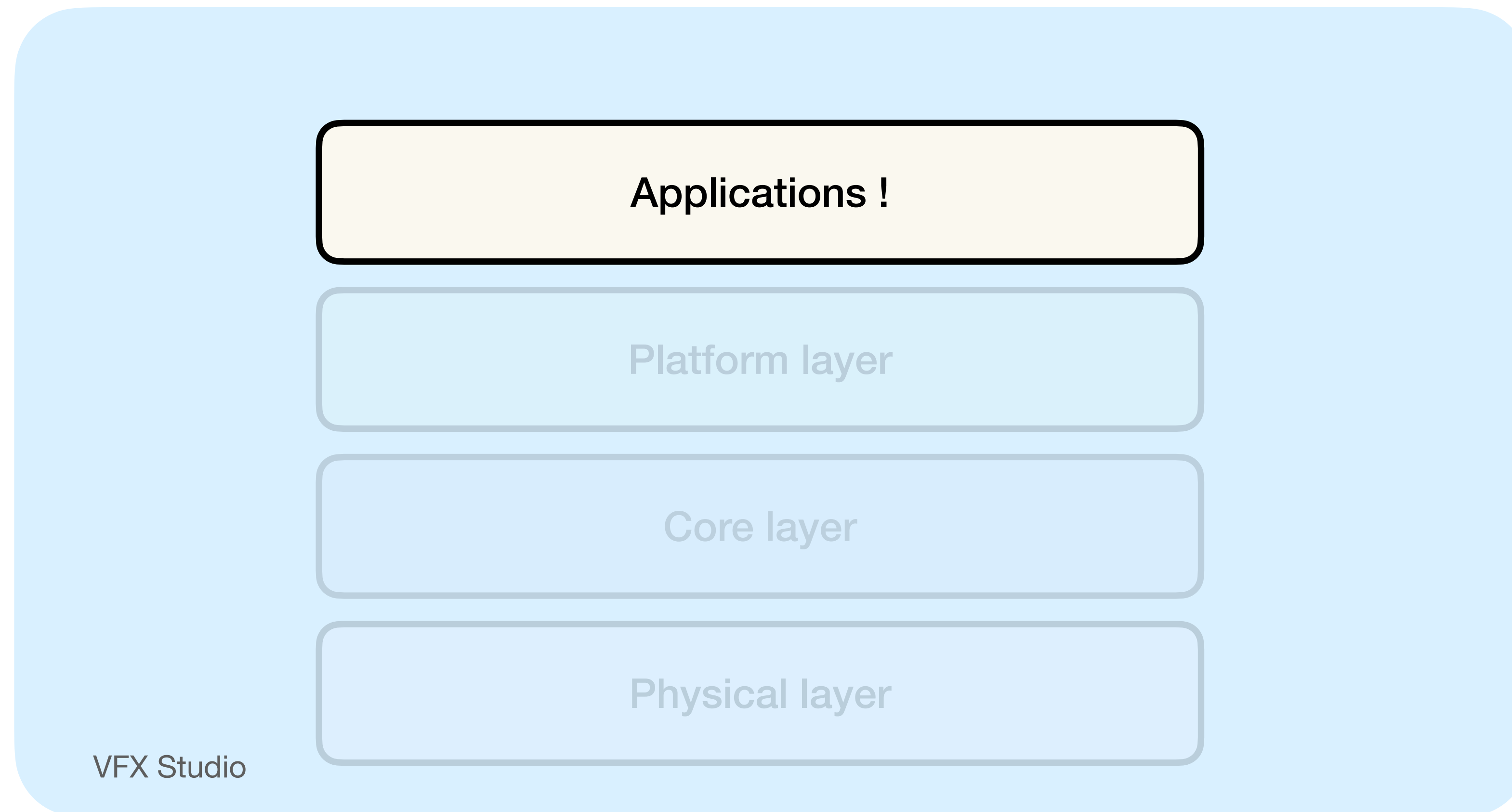
Infrastructure

Multiple studios



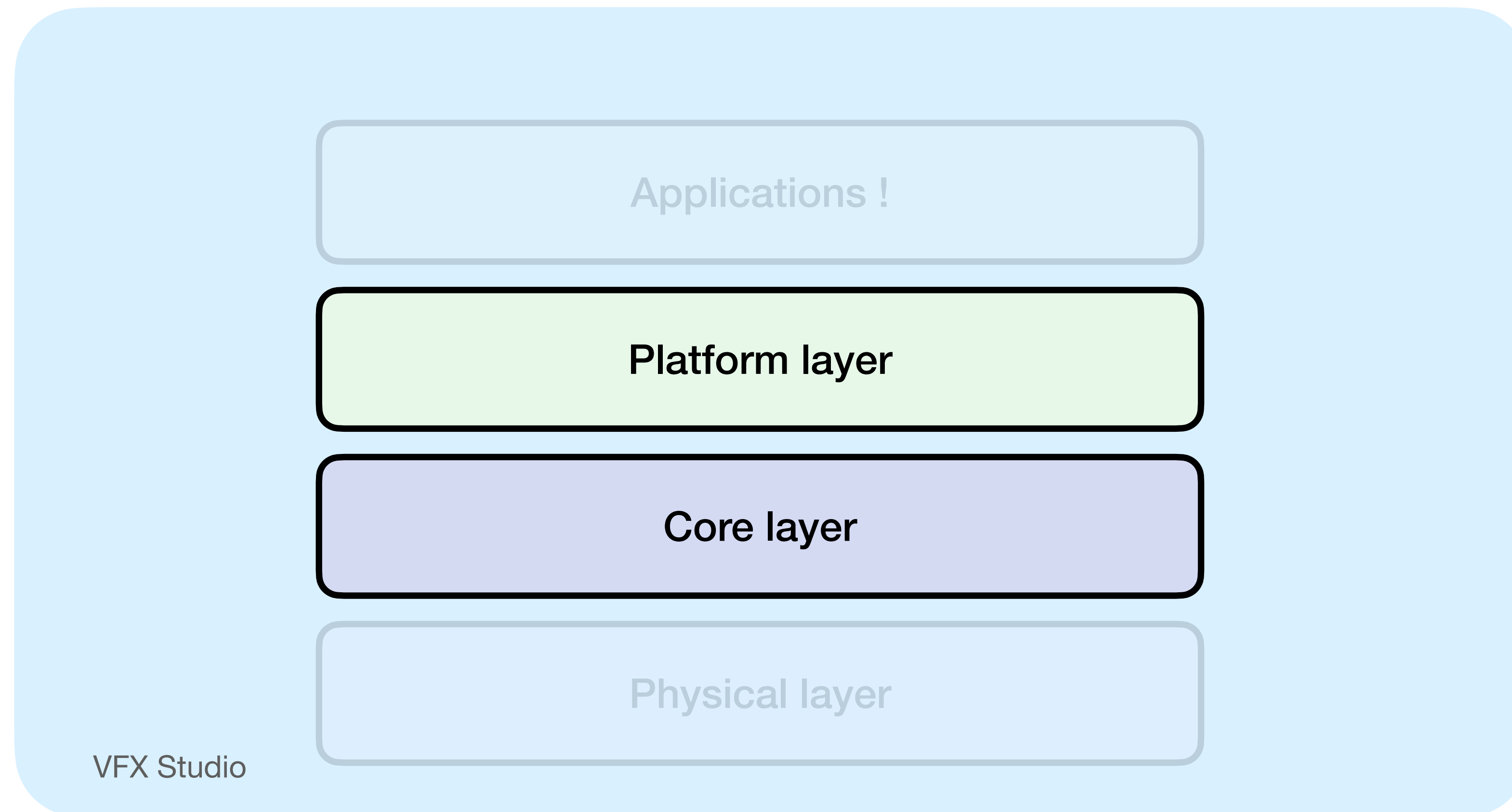
Infrastructure

Possibility in a cloud based studio



Infrastructure

Intersection of Operations and Software Developers



The intersection

- Usually different views in the same subject
 - Operations background vs Developers background
 - We're all friends
- Areas where there's a strong synergy
 - Observability (Monitoring, Logs and Metrics)
 - Provisioning infrastructure (Creating VMs, web servers)
 - Operational System Image, Software Installation, Runtime environments

**Creating & Managing our
infrastructure with Ansible!**

Configuration management

Introduction

- Recipes for installing and configuring infrastructure
 - Install nginx, configure syslog, create a VM, enable a service at boot
 - Apply a patch across all servers
- Infrastructure as code
 - Declarative
 - Versioned
 - Shareable

Configuration management

Tooling

- Tools in the space include
 - Ansible
 - Puppet
 - Salt
 - Chef
- Doesn't matter if the infrastructure is “legacy” or “trendy” there is always room for a configuration management tool!

Ansible

- Written in Python (most VFX houses bread and butter)
 - RedHat bought it recently
 - Easy to extend
 - Agentless - all you need is ssh access
 - Let's start !
- https://docs.ansible.com/ansible/latest/installation_guide/intro_installation.html

To Github