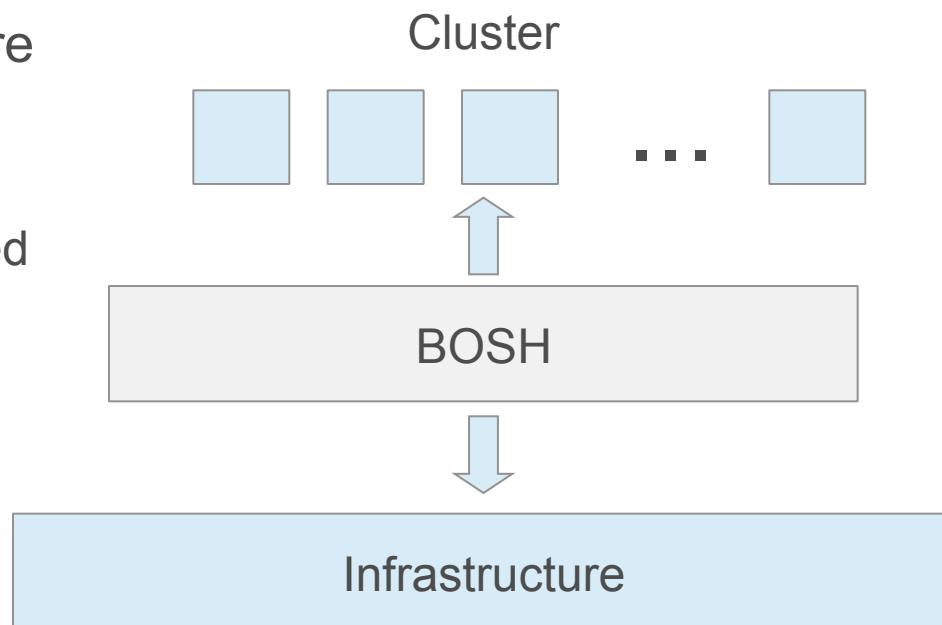# Ops Manager and BOSH Introduction

What is BOSH?

- BOSH is open source software that can deploy and manage the lifecycle of any software

  - Especially good for distributed systems and clusters

- BOSH can run on any infrastructure

 - For example, vSphere, Amazon Web Services, a Vagrant VM

Cluster

BOSH

Infrastructure

Pivotal.

Two Perspectives of BOSH

- BOSH is middleware
  - Connects the infrastructure to the cluster

- Looking "up", it is deploying and managing the lifecycle of a cluster
  - Create/recreate VMs, start/restart processes, enable continuous delivery

- Looking "down", it is using and abstracting the infrastructure
  - Cluster *doesn't care* what infrastructure it is on

Cluster

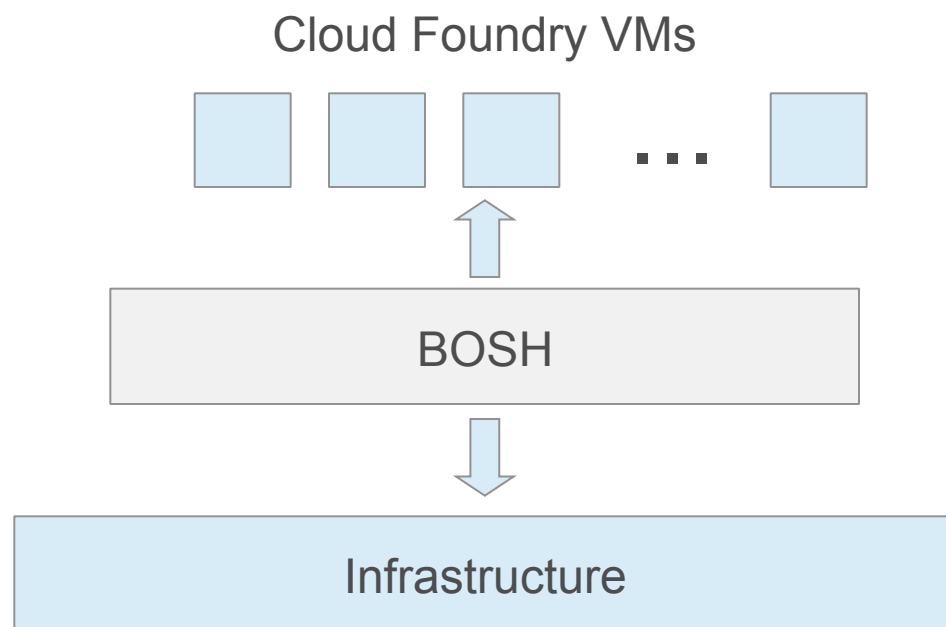BOSH

Infrastructure

Pivotal.
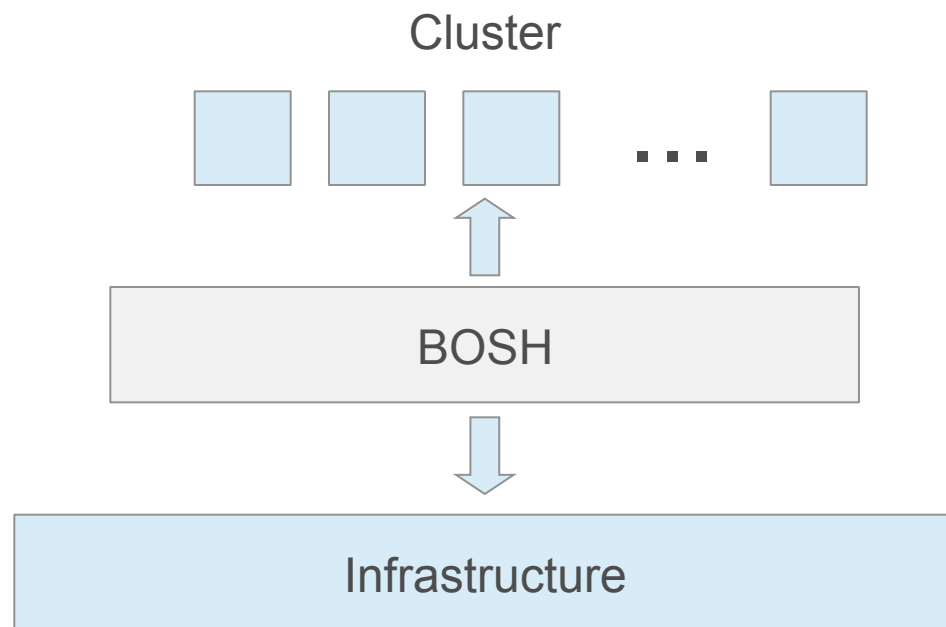
Why BOSH?

- Cloud Foundry is a distributed system that runs on many infrastructures

- BOSH was mainly designed as a *holistic* approach to deploying and managing Cloud Foundry-managed VMs

  - BOSH keeps the Cloud Foundry runtime running

Cloud Foundry VMs

BOSH

Infrastructure

Pivotal.
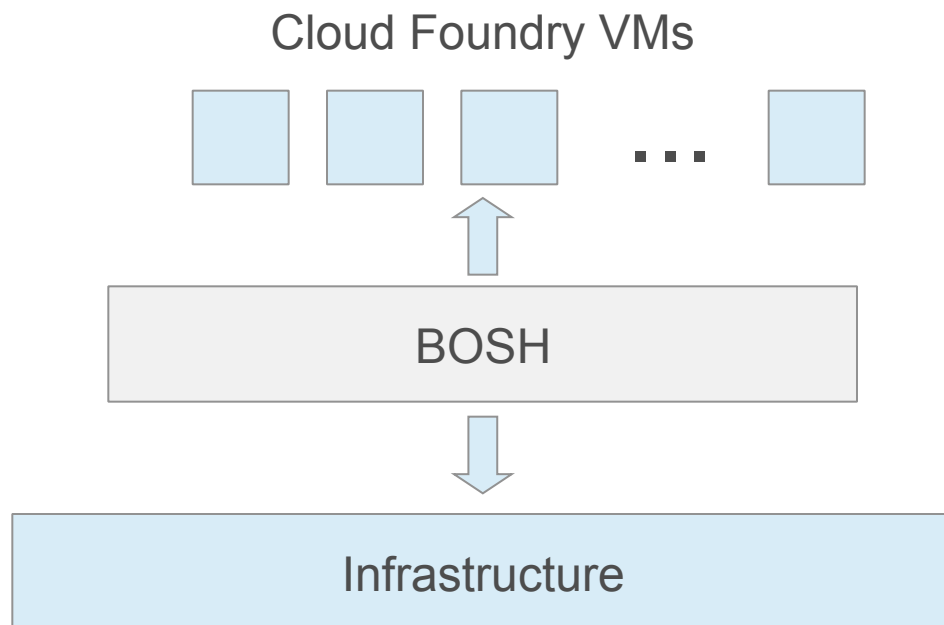
BOSH Usage

- BOSH can deploy and manage any software, not just Cloud Foundry
- You *could* use other software to deploy Cloud Foundry VMs (e.g. Chef)
- But might lose functionality: high availability, continuous delivery…

Cloud Foundry VMs

BOSH

Infrastructure

Pivotal.

Ops Manager and BOSH

- Ops Manager is a user interface on top of BOSH

- When you install or make changes in Ops Manager, BOSH-level changes are being made

  – You will see BOSH-related messages in the logs