



# ITALY

*OpenInfra Days*



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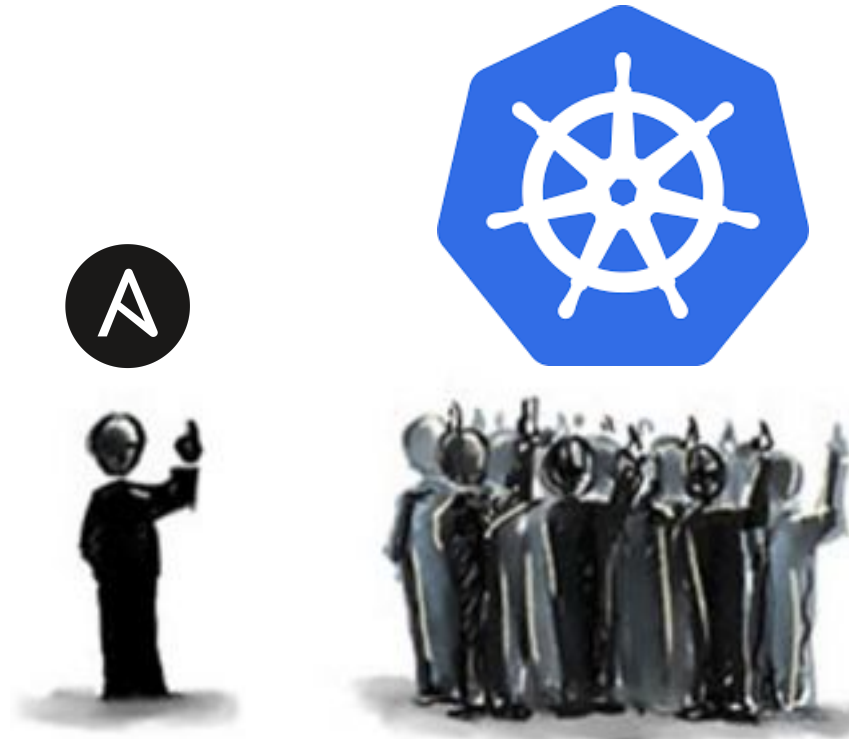
**ITALY**  
*OpenInfra Days*

Rome, 2019-10-03

# Kubernetes for the Ansible Users

*Andrea Tosatto*

# Why this talk?!



# \$ whoami

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**Andrea Tosatto**

@\_hilbert\_



I've just been added to the [@powerdns](#)  
[#DevOps](#) team! 🎉🎉🎉 It's time to celebrate  
making some servers dance! :)

RETWEET

1

LIKES

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4:06 PM - 25 Jan 2017

# Agenda

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## 1. Kubernetes? Why? What?

## 2. Ansible for Kubernetes

- Implementing Kubernetes
- Migrating existing services to Kubernetes
- Managing the lifecycle of Kubernetes applications with Ansible

## 3. Questions

# Kubernetes?

Why? What?

# **Why Kubernetes?**

## **1. Decoupling between the work of Devs and Ops**

# Why Kubernetes?

1. Decoupling between the work of Devs and Ops
- 2. High level abstraction on the infrastructure**



# Why Kubernetes?

1. Decoupling between the work of Devs and Ops
2. High level abstraction on the infrastructure
- 3. Integrated state reconciliation mechanism**

# Why Kubernetes?



**Gabriele Santomaggio** • 2nd

RabbitMQ expert, Kubernetes / OpenStack Middleware modules  
4d • Edited

Io: Non so scrivere applicaizoni multi-core

Esperto: Scrivi tanti micro-servizi

Io: Non so scrivere applicazioni stabili

Esperto: metti il microservizio dentro docker che se va in crash lo riavvia

Io: Ok bello, di cosa ho bisogno?

Esperto: Allora devi isntallare K8s, poi un sistema di gestione di questi microservizi, servizi di monitoring per vedere se il cluster k8s funziona, devops, definire servizi di integrazione etc...

Io: Penso che investirò il mio tempo ad imparare a programmare che mi sembra più economico. [#kubernetes](#)

[See translation](#)

   28 • 25 Comments



**Jacopo Nardiello** • 1st

Founder @ SIGHUP, CNCF Ambassador, Core Organizer of the Kuber...

1d ...

K8s non e' fatto per essere gestito dai singoli. E' pensato per le organizzazione per disaccoppiare il lavoro dei programmatori, dal setup/governance d'infrastruttura di basso livello.

Tu programmatore, continua a programmare a meno che tu non voglia cambiare lavoro. Non e' un caso che l'adoption sia guidata da banche ed enterprise in generale.

[See translation](#)

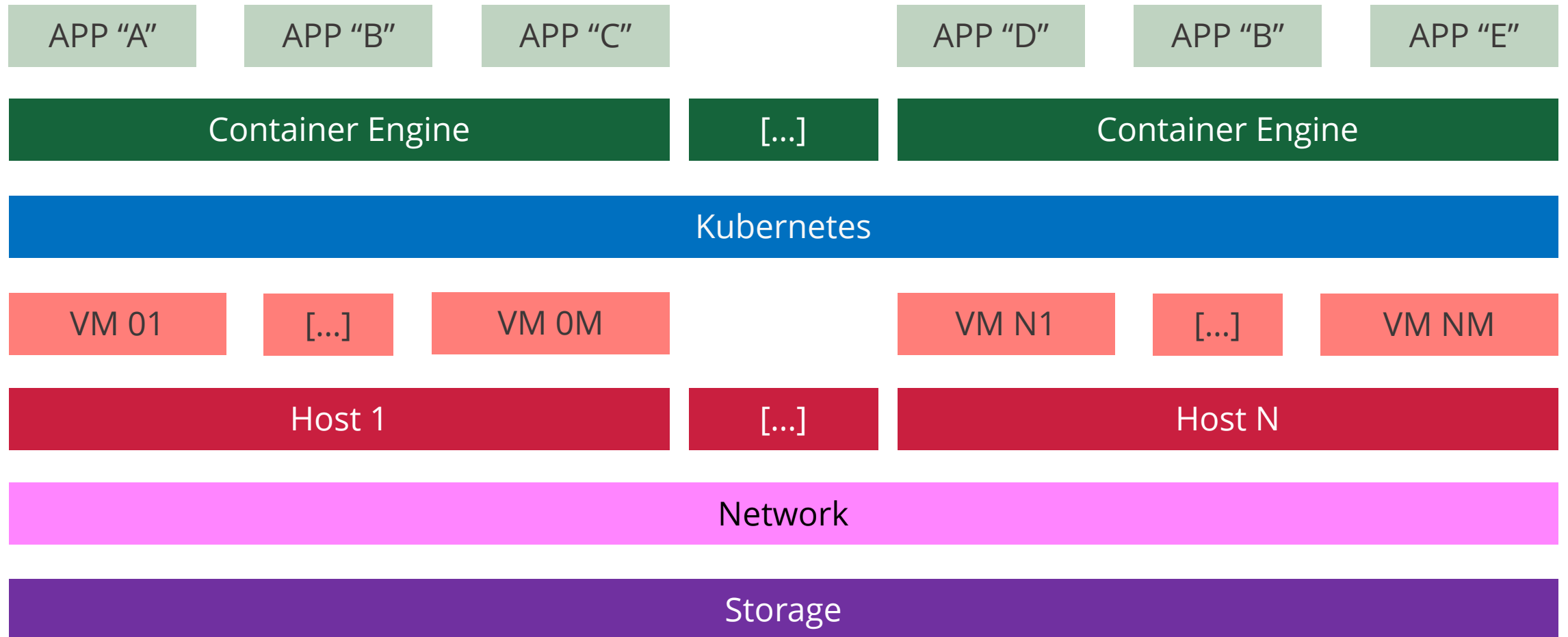
 • 6 Likes | 

# **Ansible**

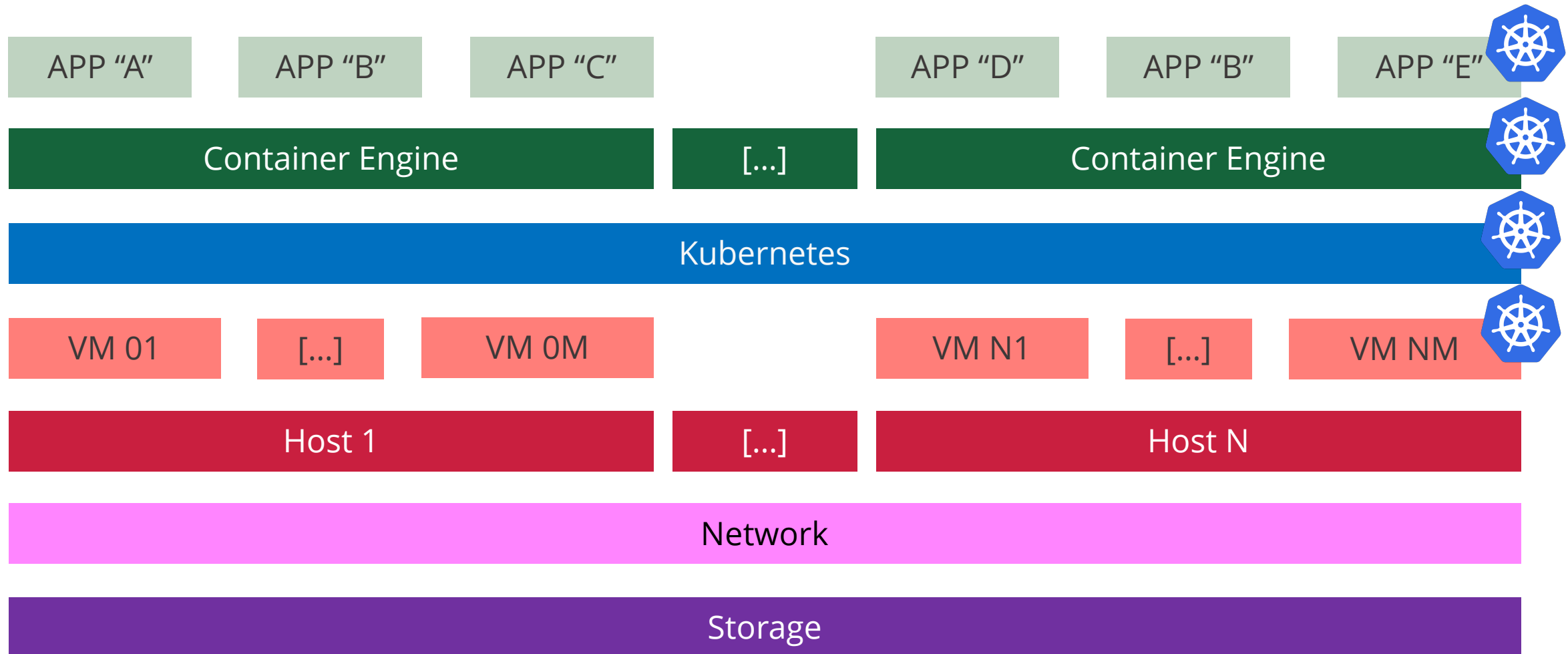
## **for Kubernetes**

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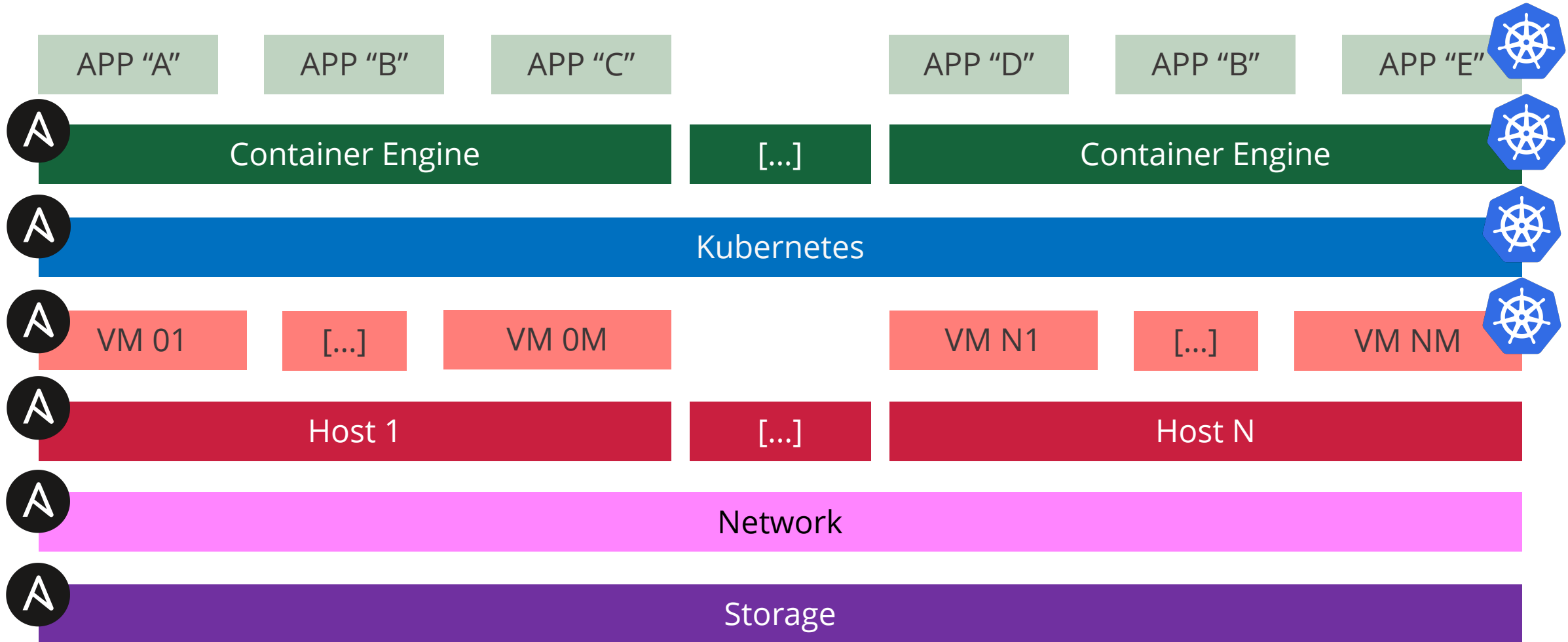
# Implementing Kubernetes



# Implementing Kubernetes



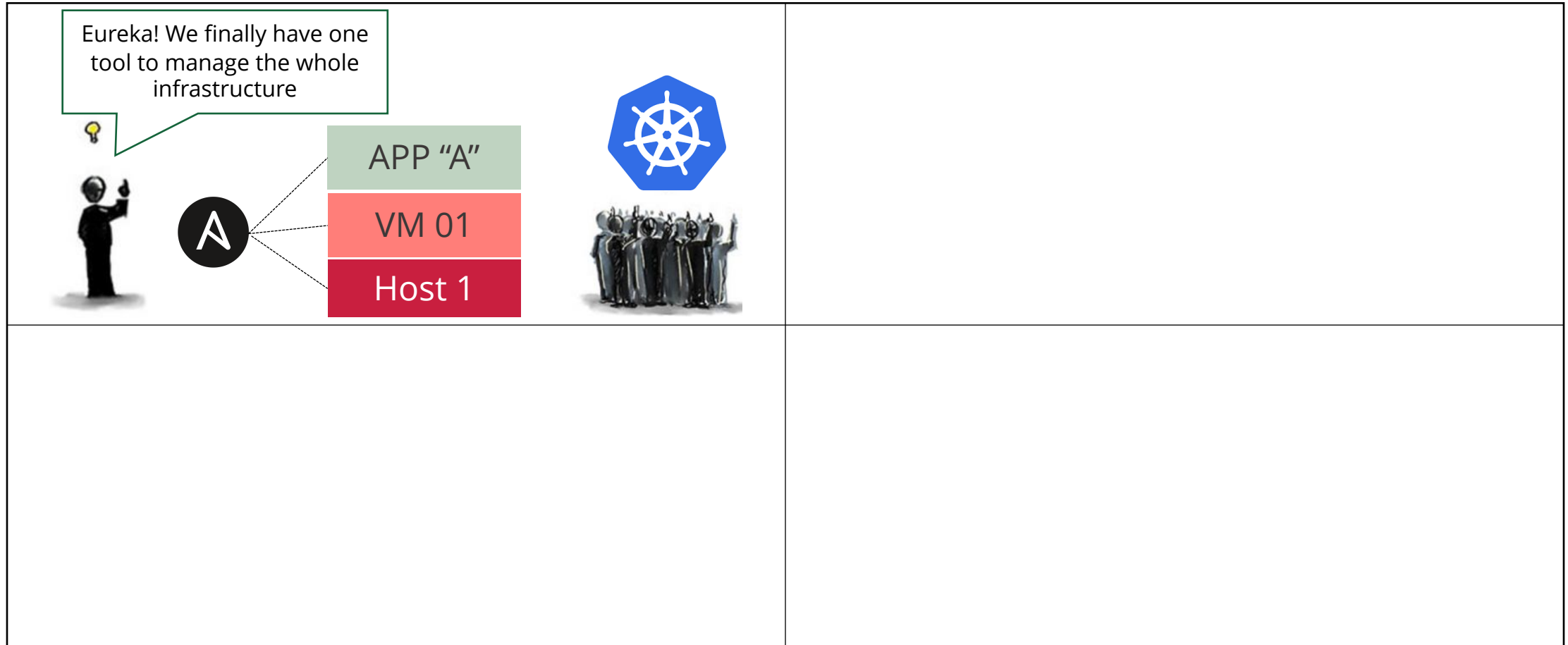
# Implementing Kubernetes



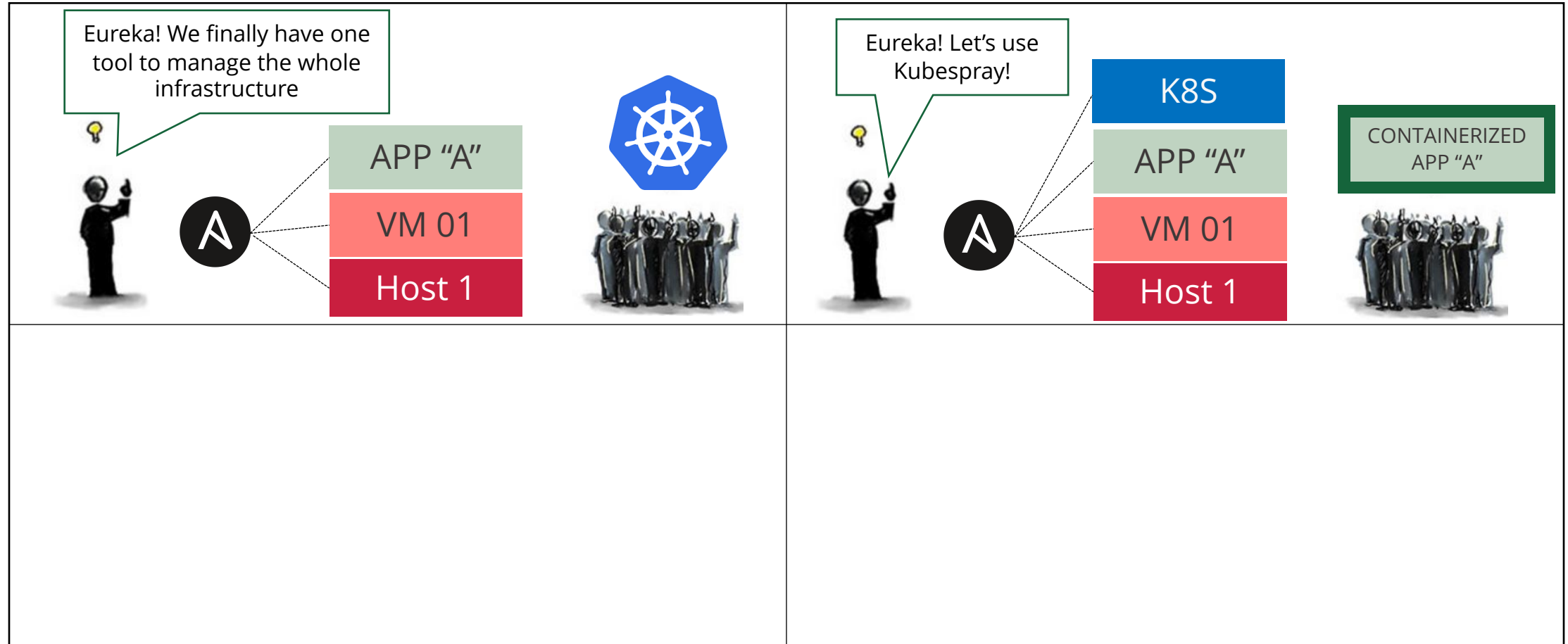


# Migrating Existing Services to Kubernetes

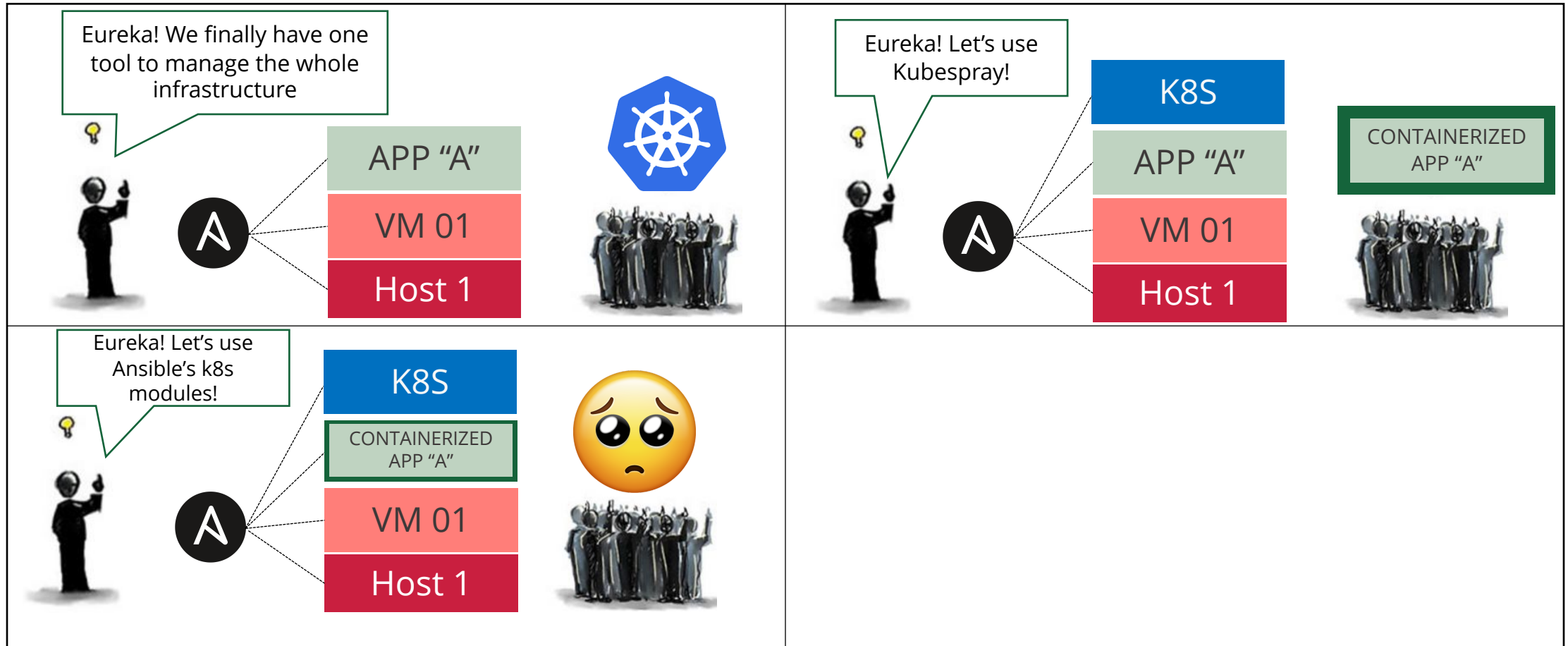
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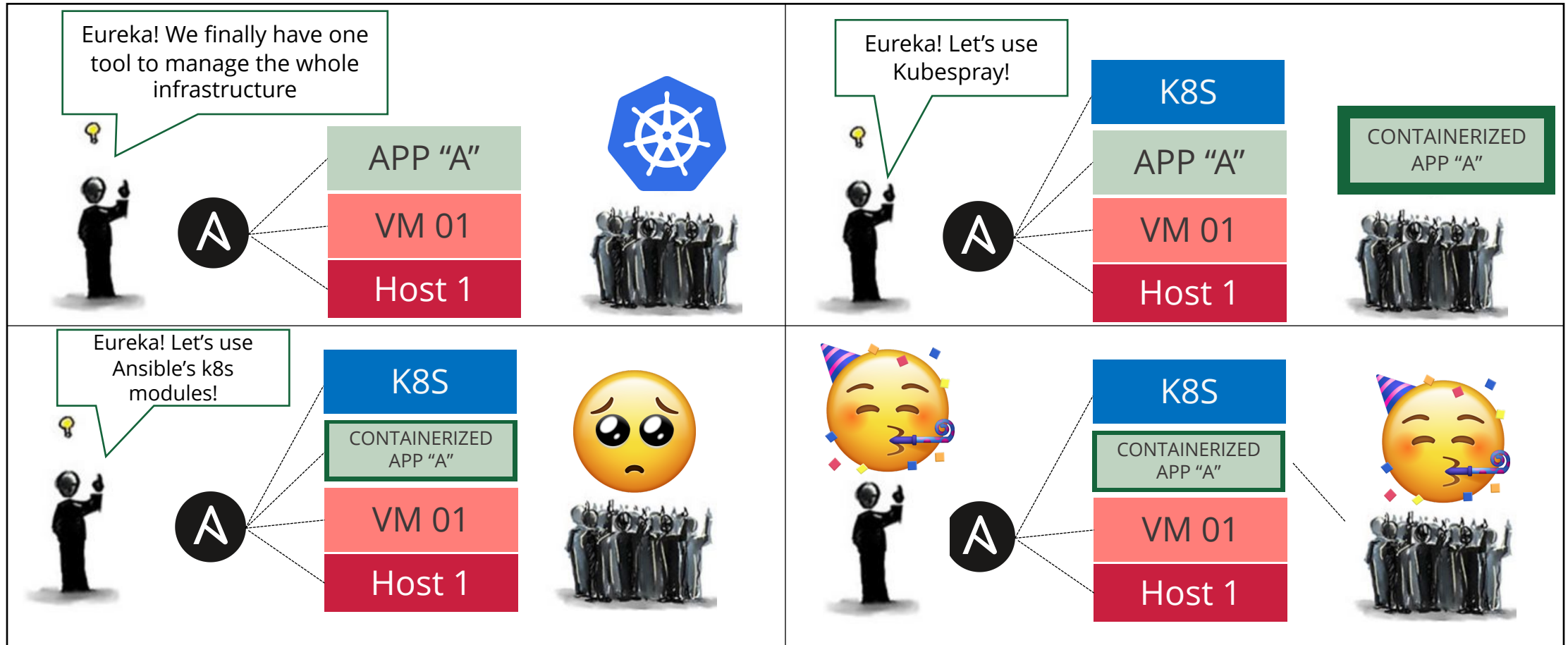
# Migrating Existing Services to Kubernetes



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# Migrating Existing Services to Kubernetes



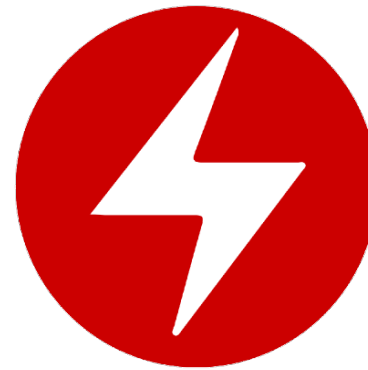
# Lifecycle management of K8s apps with Ansible

What about legacy applications, stateful service, database migrations, ..?



# Lifecycle management of K8s apps with Ansible

What about legacy applications, stateful service, database migrations, ..?



+





# **Conclusions**

**Ansible will still play a key  
role in the management  
of servers and  
infrastructure**

**You don't have to use  
Kubernetes...**



**But eventually you  
might end up doing it!**





**Kelsey Hightower** ✓

@kelseyhightower



If I had to do it all over again, I might leverage something like Kubernetes, but it would be hidden underneath some change management system, and would be considered an implementation detail.



**Kelsey Hightower** ✓ @kelseyhightower · Oct 1

Thinking back, I was able to do 95% of what we call Cloud Native with a bunch of VMs, an application server, and configuration management tools.

Once I integrated with the change management process so could the rest of the organization.

2:01 AM · Oct 1, 2019 · [Twitter Web App](#)


**17** Retweets **143** Likes



# Thanks!

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Andrea Tosatto

 @\_hilbert\_

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OpenInfra Days  
2019

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# References

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- **Kubespray**: deploy a Production Ready Kubernetes Cluster with Ansible  
<https://github.com/kubernetes-sigs/kubespray>
- **Ansible Kubernetes Module**  
[https://docs.ansible.com/ansible/latest/modules/kubernetes\\_module.html](https://docs.ansible.com/ansible/latest/modules/kubernetes_module.html)
- **Ansible Operator**  
<https://www.ansible.com/blog/ansible-operator>

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