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Kris Buytaert
@krisbuytaert

Nomad, your lightweight container
Orchestration platform

Who am I ?

- I used to be a developer
- Then I became an Ops person
- Chief Trolling/Travel/Technical Officer @ Inuits.eu
- Everything is a Freaking DNS Problem
- DNS : devops needs sushi
- Buiding Clouds since before the Bookstore
- Organiser of #devopsdays, #cfgmgmtcamp, #loadays, ...

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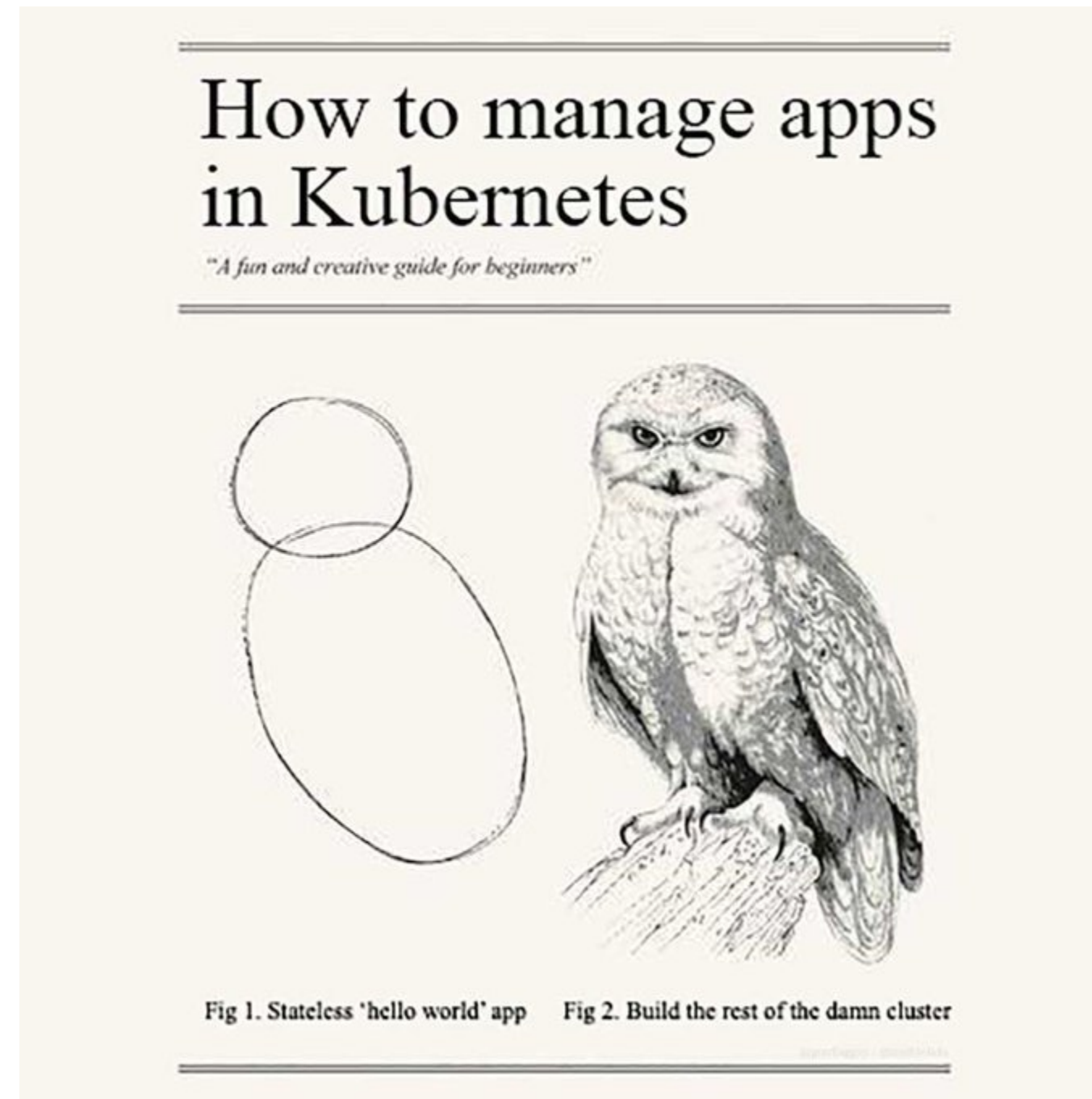OPEN SOURCE OBSERVABILITY

K8s ecosystem

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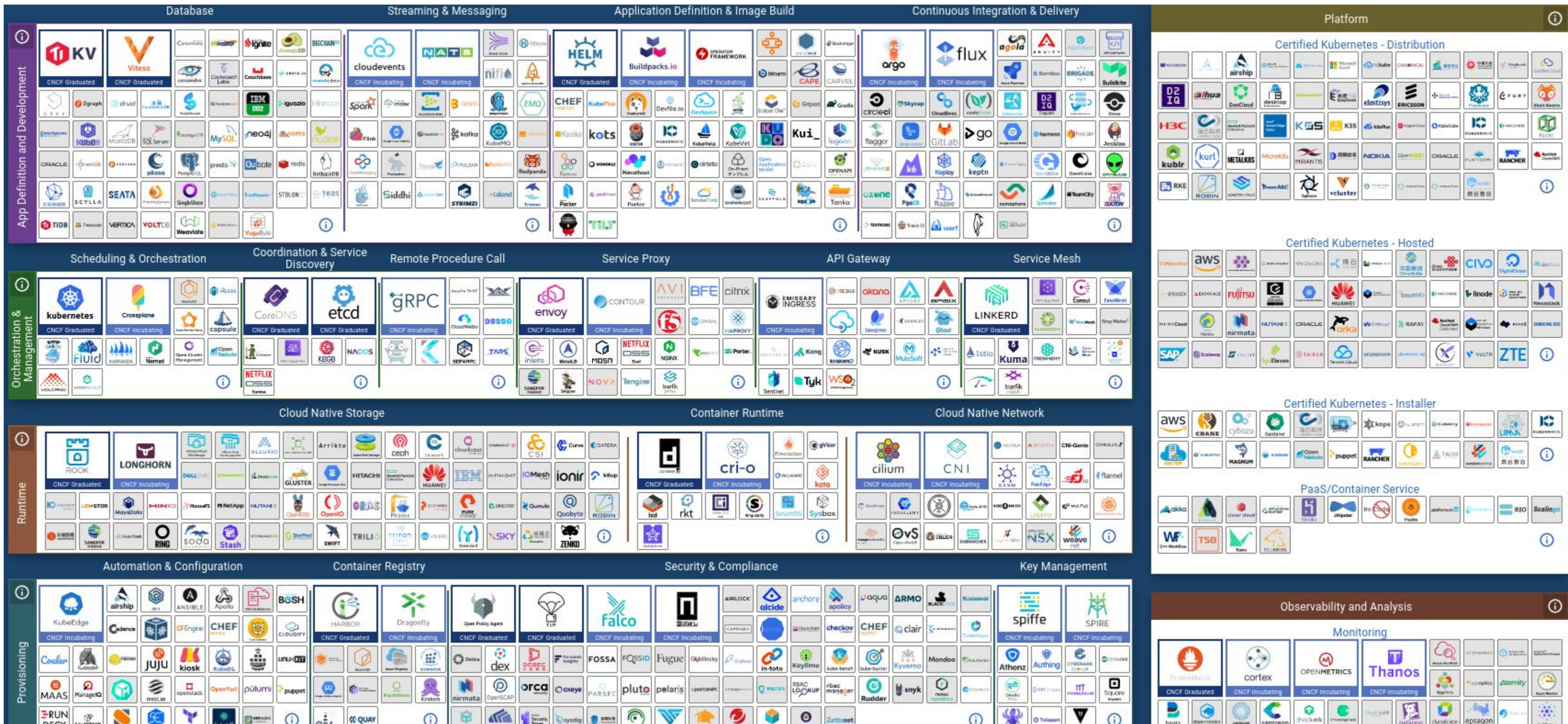
On premise deployment

- Kubespray
- Rancher
- OpenShift
- Roll your own
- ...

Most orgs don't stick with the setup they started with

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Typical Kubernetes deployment

How many clusters

- You need to test your cluster configurations
- Service Mesh / CNI variants
- Can you live with the SPOF ?
- Often mutliple clusters per team

Cargo Culting

Probably < 10% of our industry has a real use case
If you are in that 10% K8s is AWESOME
If you are not "Friends don't let friends run kubernetes"

Even though it is a huge Consulting opportunity, we advise against.

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YAGNI

- Statefull containers
- Complex deployment stagies
- Additional network complexity

What do you really need ?

A way to trivially deploy stateless containers consuming external databases and object storage in a scalable fashion on multiple servers.

Nomad

SIMPLICITY

- single binary
- YAML configuration file
- default distributed, high available and simple operationally
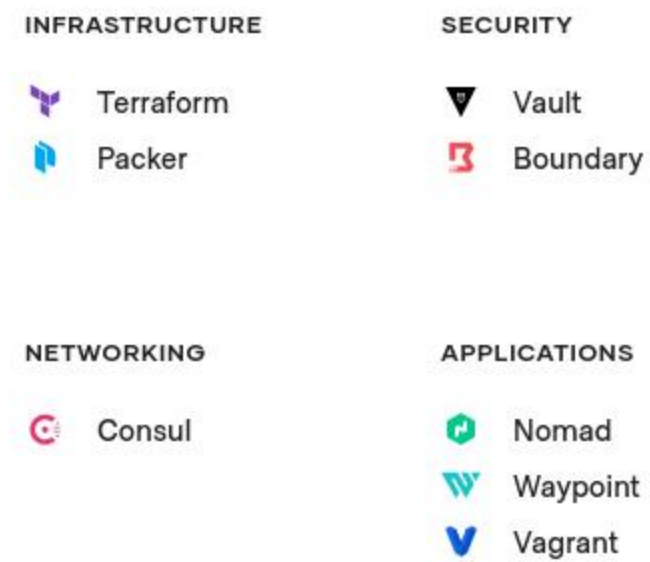- yet much simpler architecture with same functionality

Workload

- docker
- java
- Qemu
- raw
- ...

Scalability

- single binary being it locally, cloud, on-prem, prod..
- multi availability zones, regions and datacenters in a single cluster or multiple ones

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HashiCorp

- Seamlessly integration within the HashiCorp ecosystem (which you also might want/need to use in your K8s anyhow)

INFRASTRUCTURE
- Terraform
- Packer

SECURITY
- Vault
- Boundary

NETWORKING
- Consul

APPLICATIONS
- Nomad
- Waypoint
- Vagrant

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Consul

- Service discovery
- Dynamic configuration for other tools like prometheus, traefik, ...

comparison?
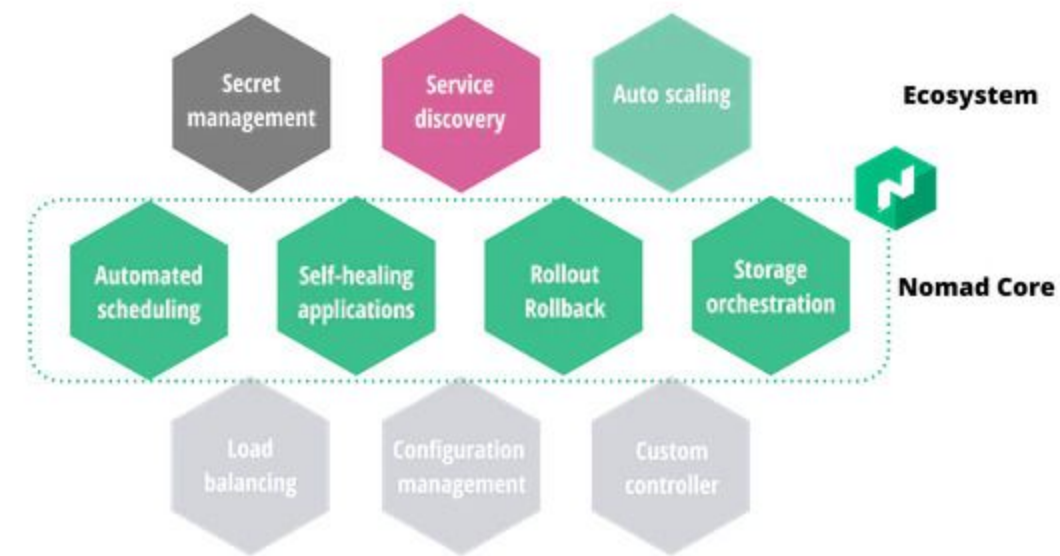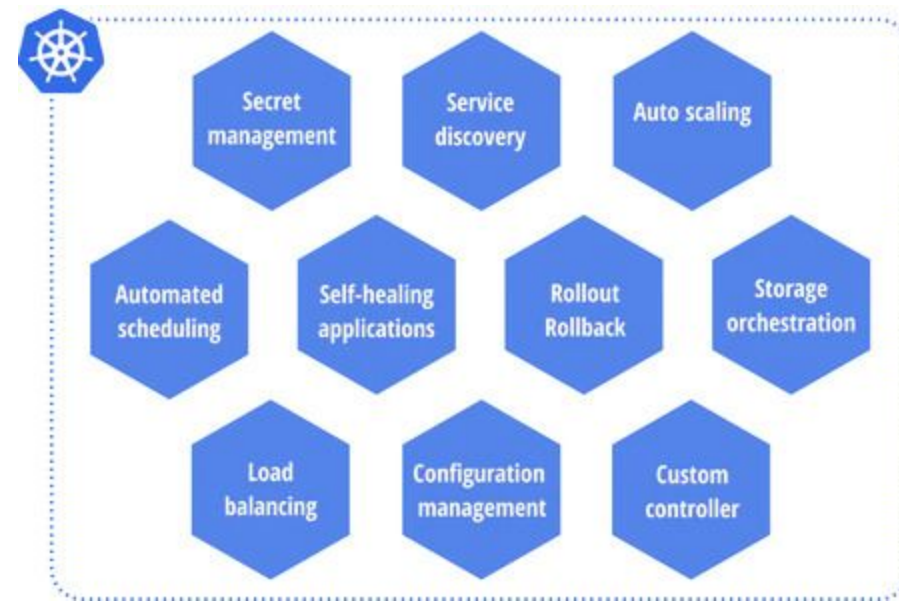
Other alternatives

- Cloud provided K8s
- Minikube,K3s (not for production)
- Docker Swarm

some lightweight implementations don't always cover the full feature set,
with the pitfall of configuration inconsistencies when going to production

Summary

Ask your doctor if K8s is good for you.

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BossMode

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