

Kubernetes IRL

...

In Real Life.



@IanDCrosby



@containersoluti



Container
Solutions

Outline

- What is (Container) Orchestration?
- Cloud Native Maturity
- Kubernetes in the Wild
 - Where to run?
 - Handling environments and security
 - Configuring your applications
 - Monitoring
- Wrap up

This talk is not...

- An argument for Orchestration
- Promotion of Kubernetes
- Kubernetes 101



“The planning or coordination of the **elements** of a situation to produce a **desired effect**, especially ~~surreptitiously~~”

MAGIC



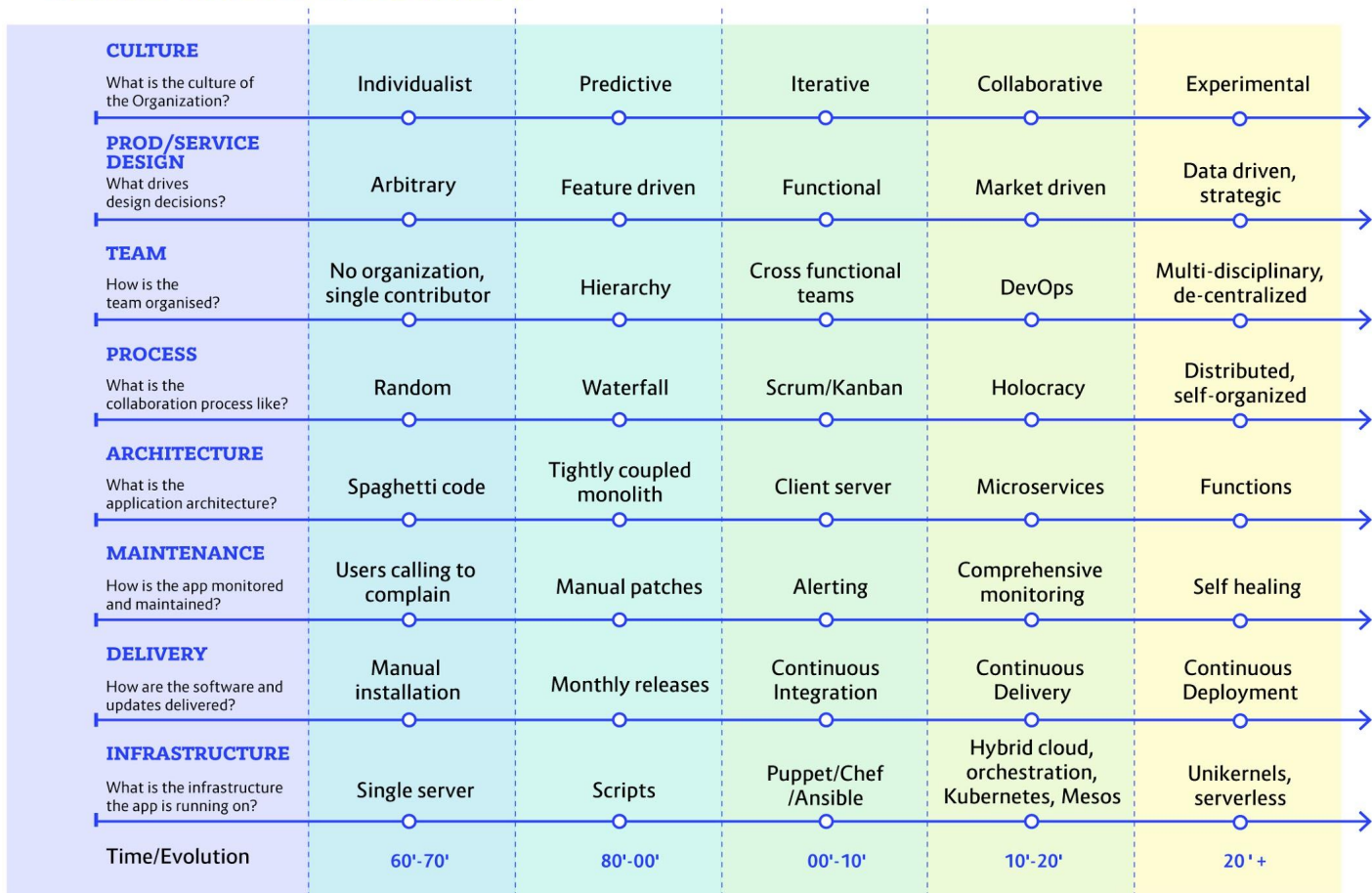
One Kubernetes
Please!





“Tools will not solve your people issues.”

CLOUD NATIVE MATURITY





PHASE 1 PHASE 2 PHASE 3

Kubernetes

?

Profit



The stories you are about to hear are true. Only the names have been changed to protect the innocent.



or



disruptiveStartUp.io

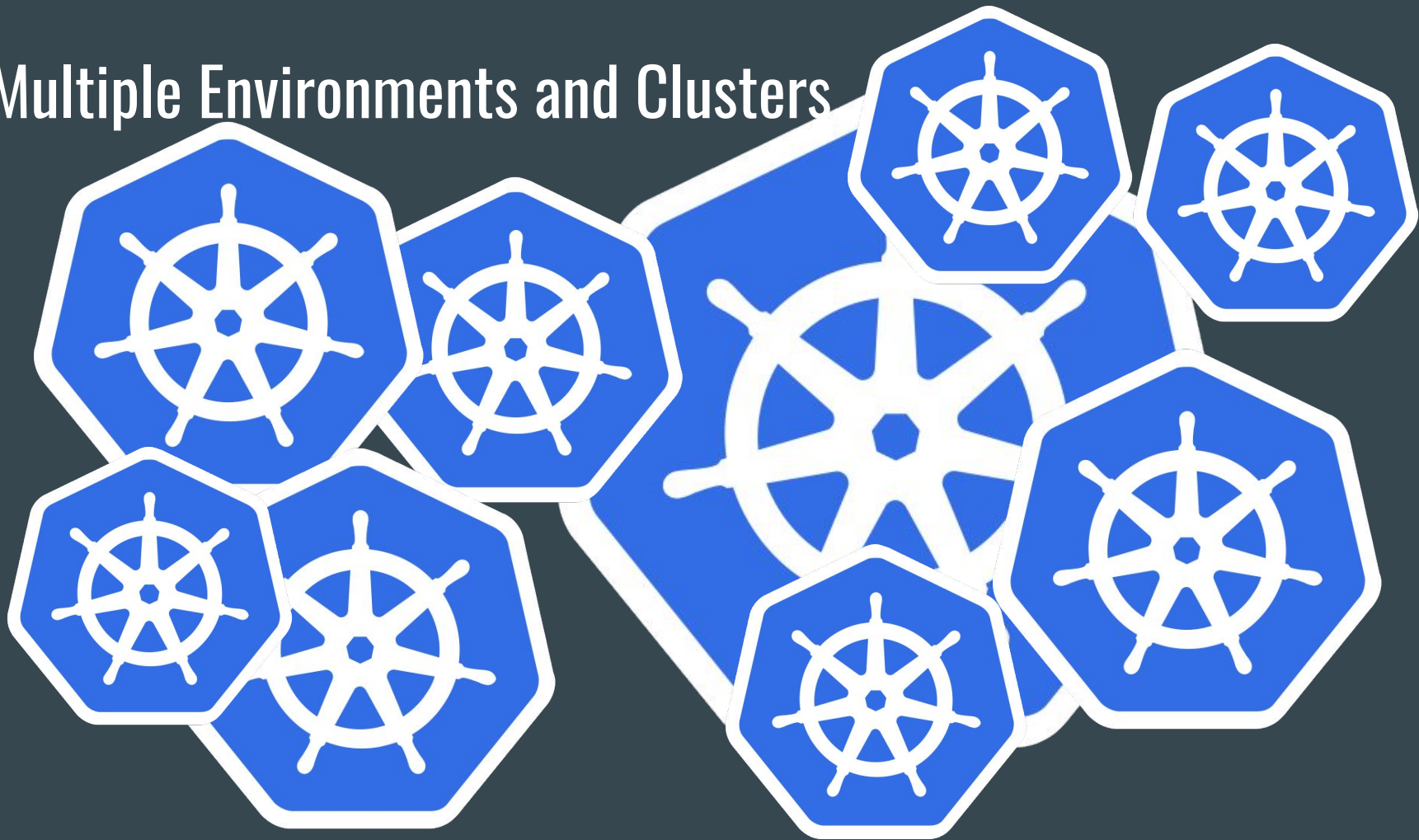


pied piper

secretForeignGovtDept.xx

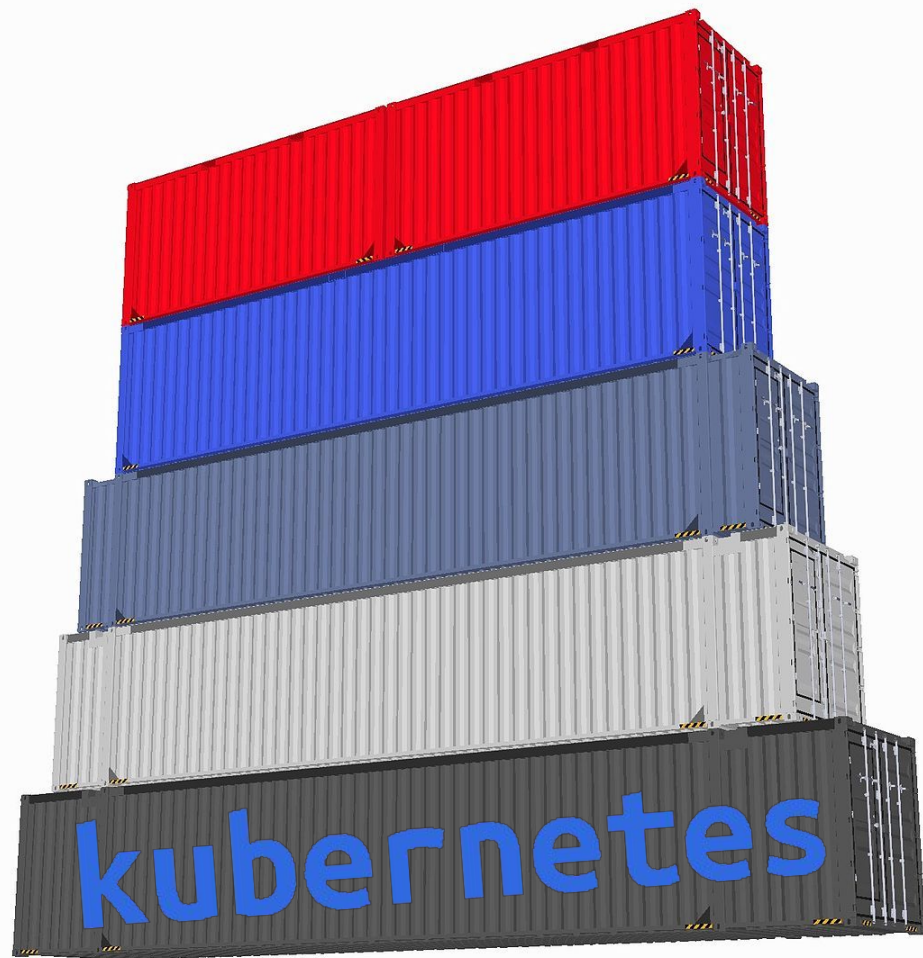


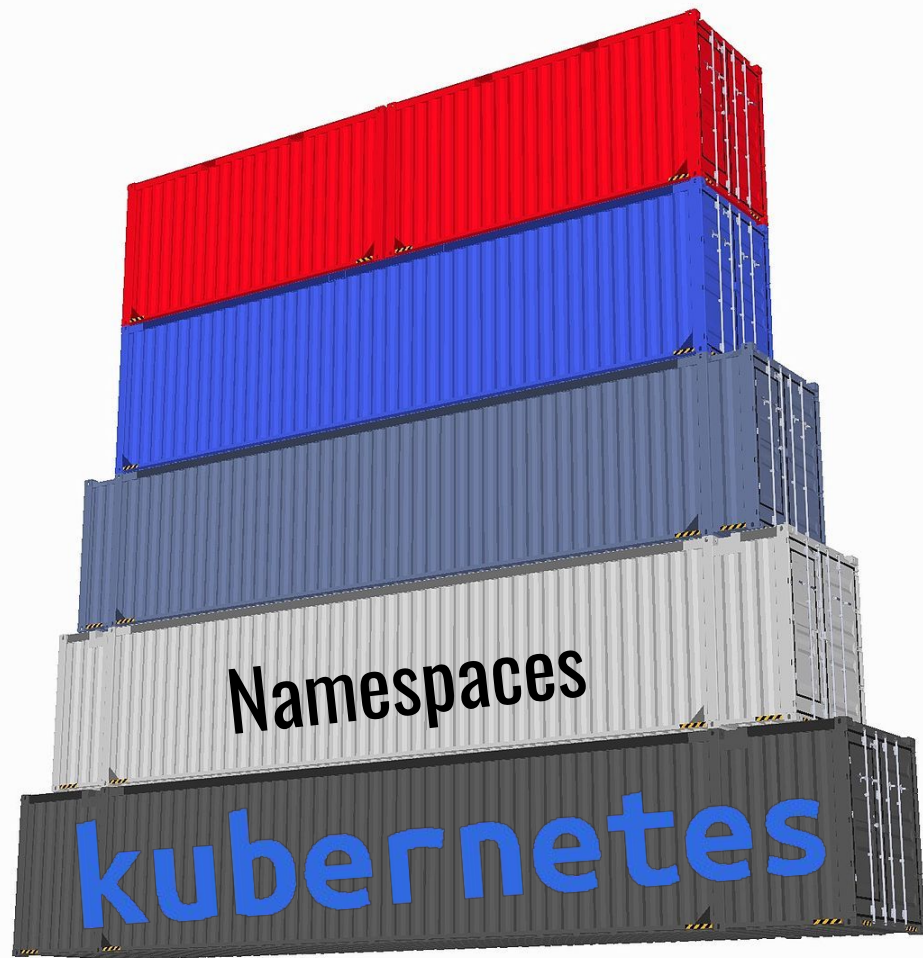
Multiple Environments and Clusters

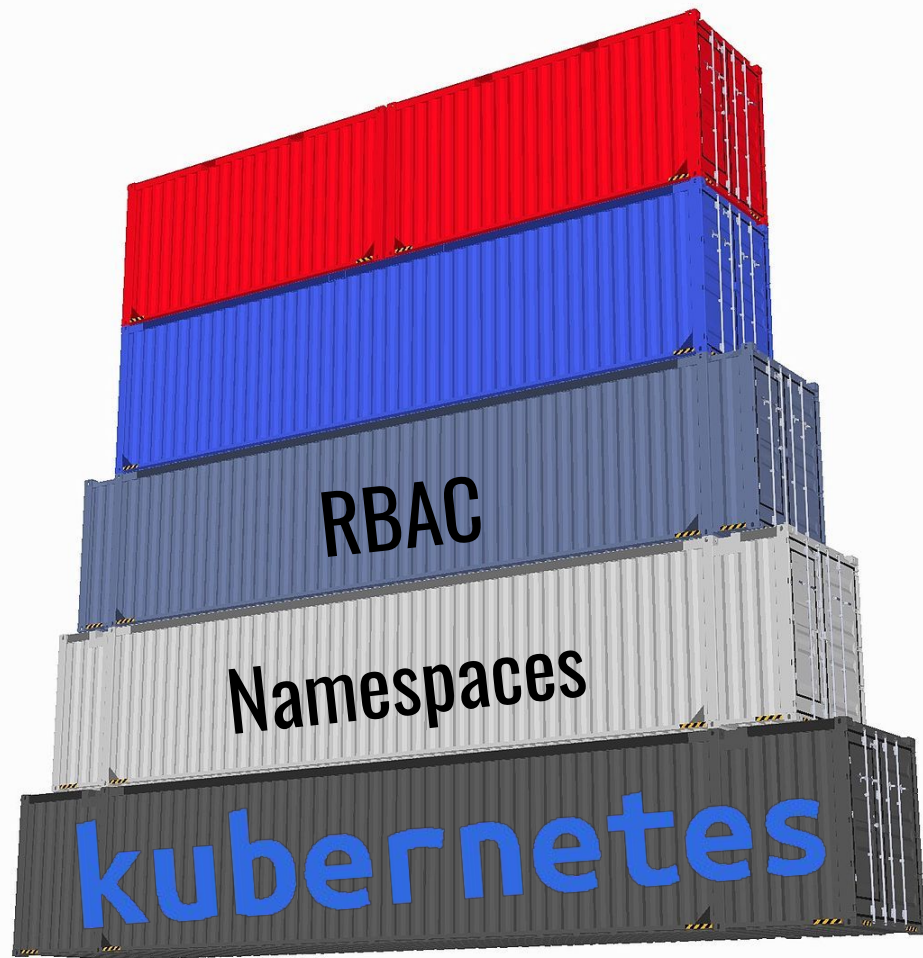


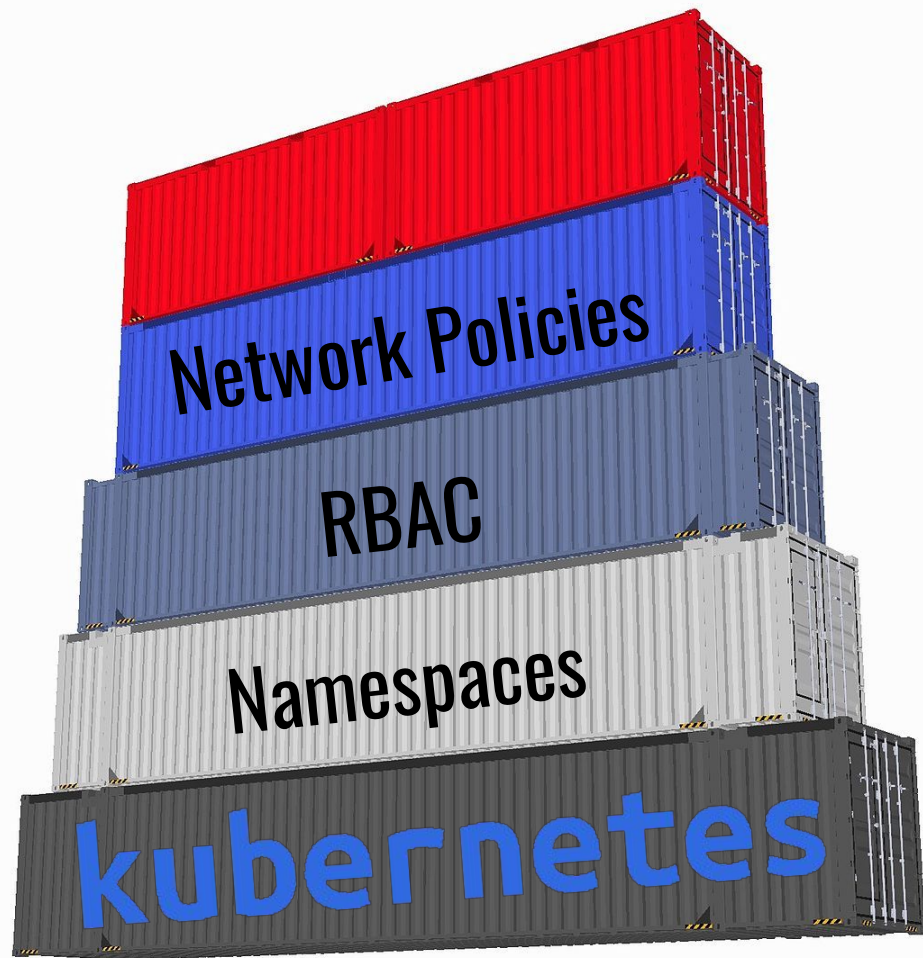
genericWeatherService.com

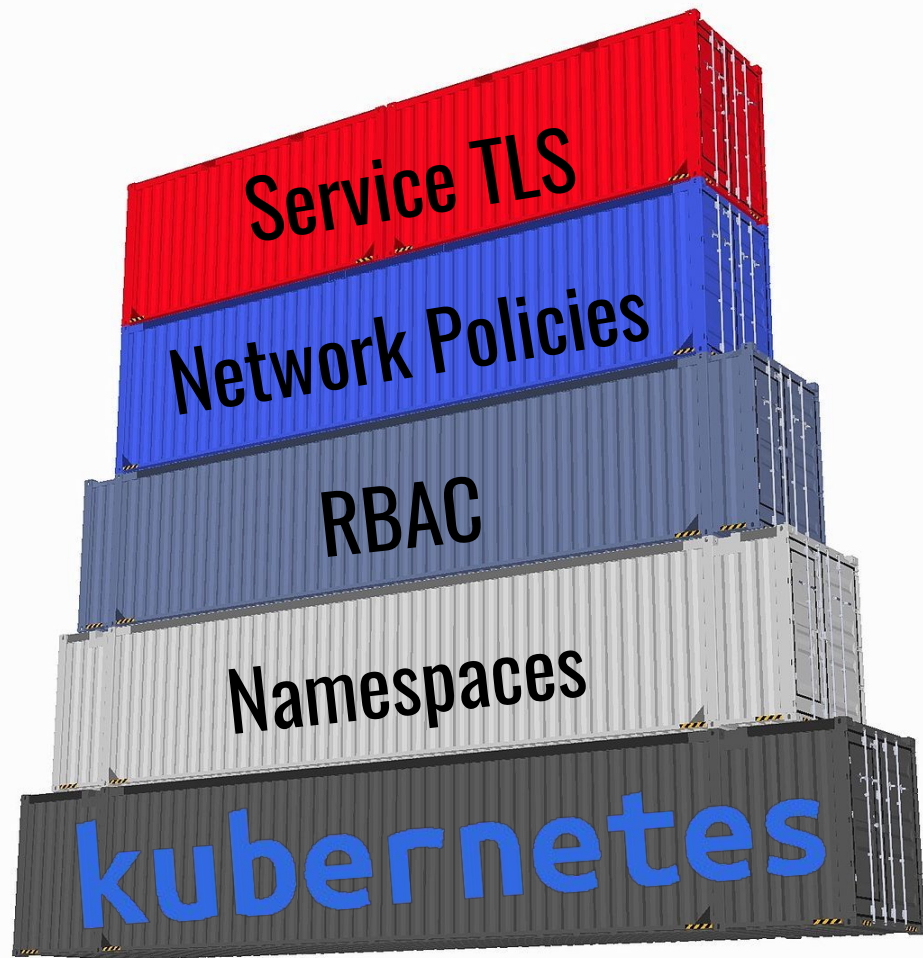












Deploying your applications



```
$ kubectl run this-app --image=my-app
```

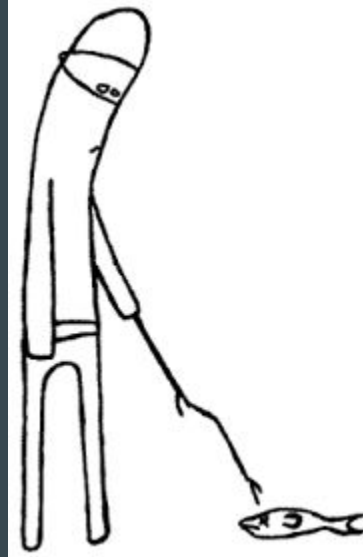
governmentBranchService.org

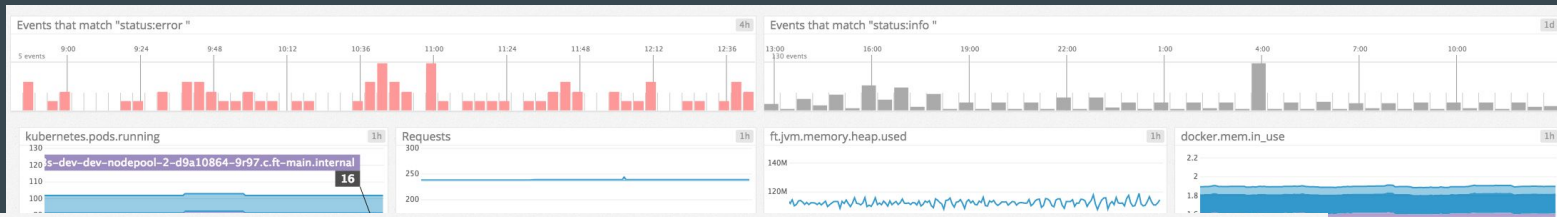


Quality of Service (QoS)

- Guaranteed
- Burstable
- Best Effort

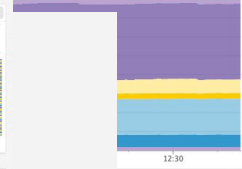
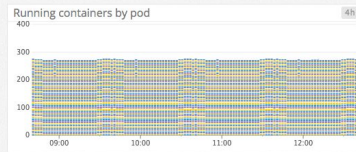
Monitoring



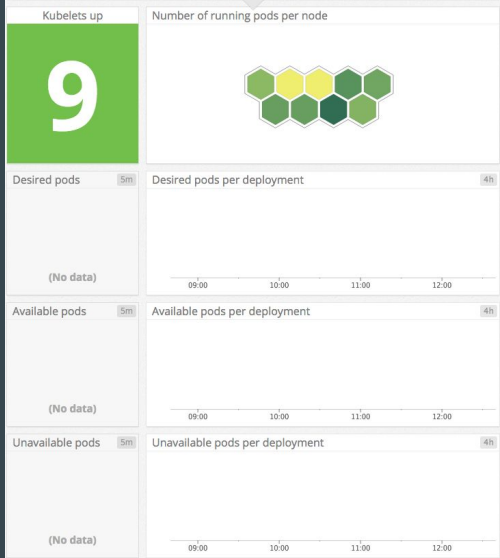


This screenboard displays Kubernetes metrics. But you should also track and even prefer native container metrics. [Here is why.](#)

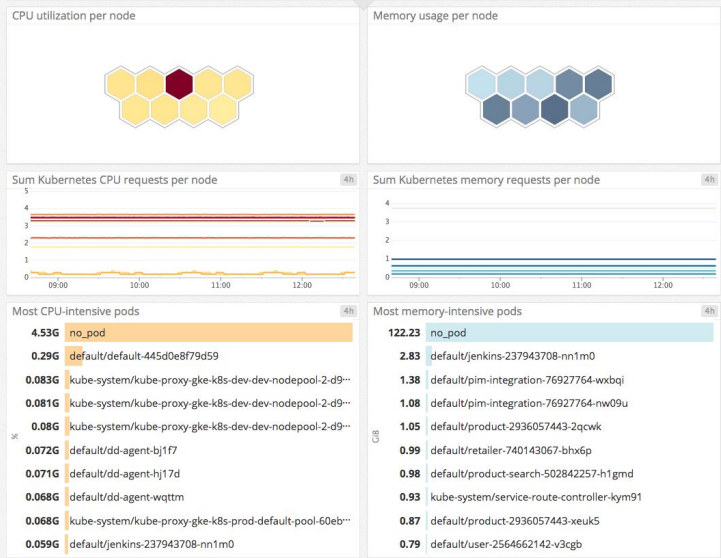
Running containers: **269**
Stopped containers: **19**



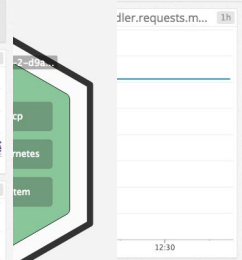
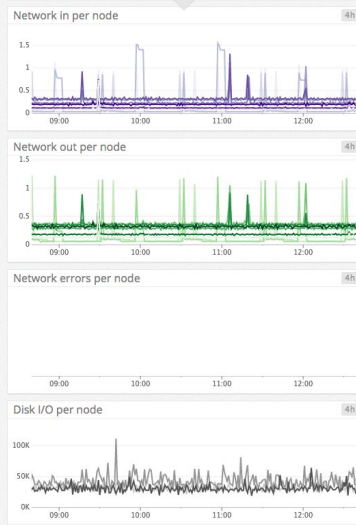
Pod deployments



Resource utilization



Disk I/O & Network



Takeaways

- Orchestration is the future (for most of us)
- Don't put the cart before the horse
- Cloud Native is not just about the tools
- Leverage the technology

Thanks

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