

A SAFARI OF KUBERNETES

Narrated By:
A Mediocre Impression Of Sir David Attenborough

Episode 1: Hunger

By: Noah Abrahams, StormForge
 @Noah_Abrahams



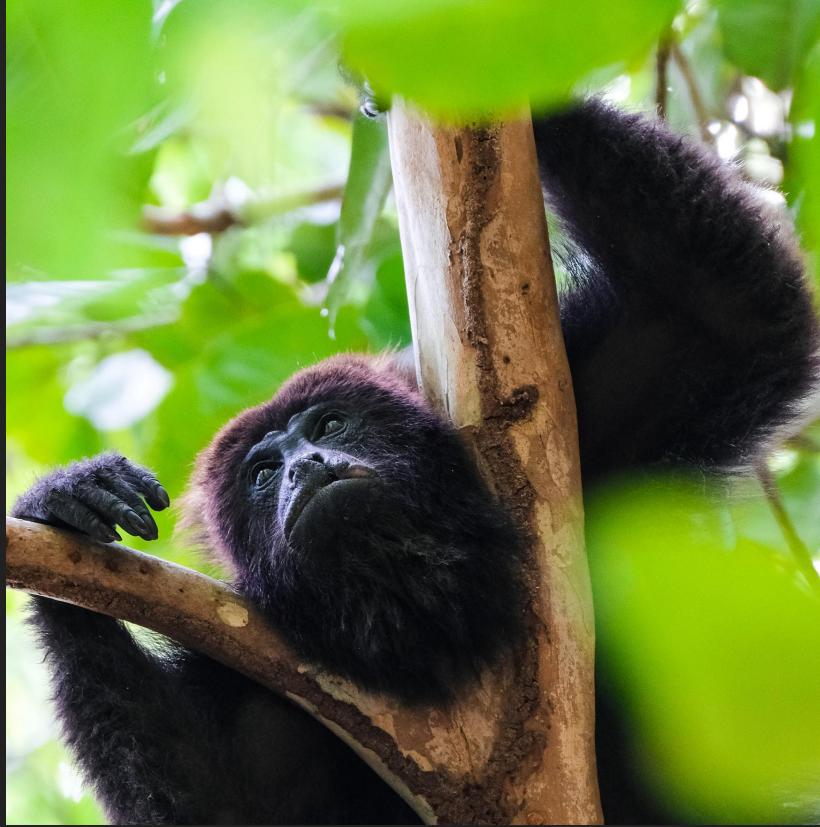
Evening in the Data Center

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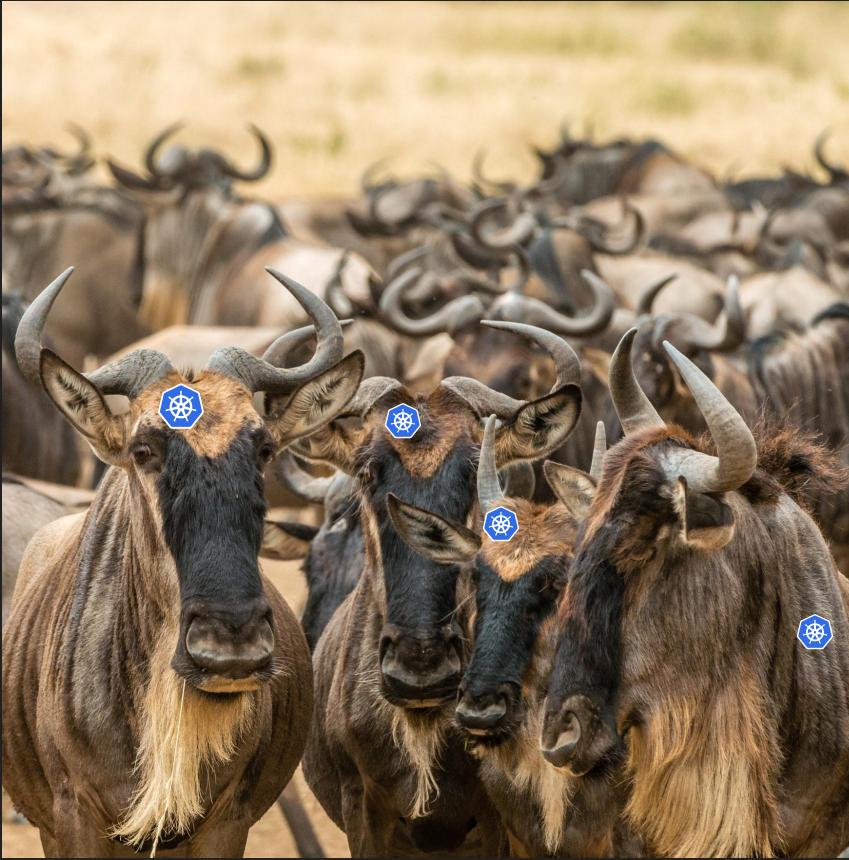
The IT staff makes a hasty retreat

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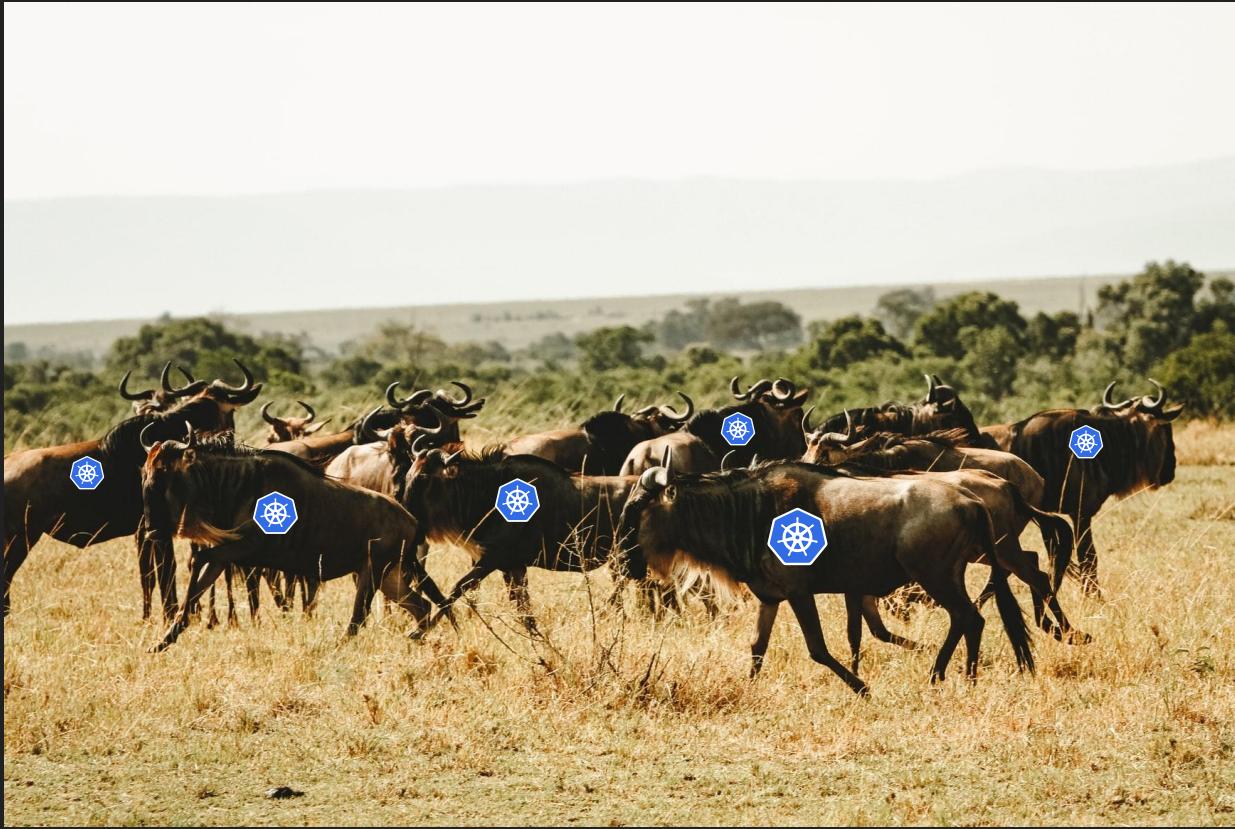
Pagerduty is quiet... for now.

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A wild cluster

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What you refer to as a wildebeest is actually a gnu/wildebeest...

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Nutritious YAML

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There are many denizens of this ecosystem

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The developers log in

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Developers must adapt to their environment

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The developers go hunting

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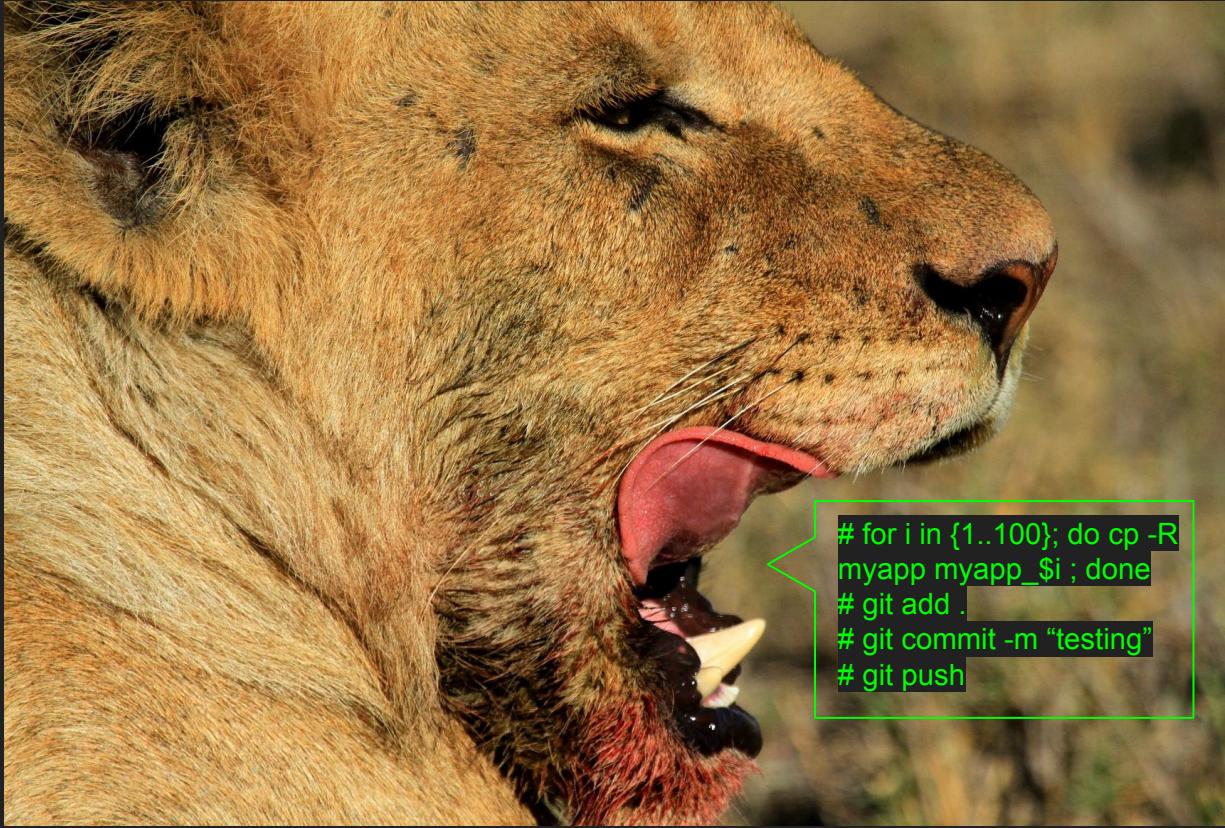
The River ArgoCD

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Argo makes it super efficient

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```
# for i in {1..100}; do cp -R  
myapp myapp_$i ; done  
# git add .  
# git commit -m "testing"  
# git push
```

Hungry for more

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Nodes are at capacity

Photo Attribution: [Shankar S.](#) under CC BY 2.0

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Cluster scaling

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Additional nodes arrive

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The pool runs dry

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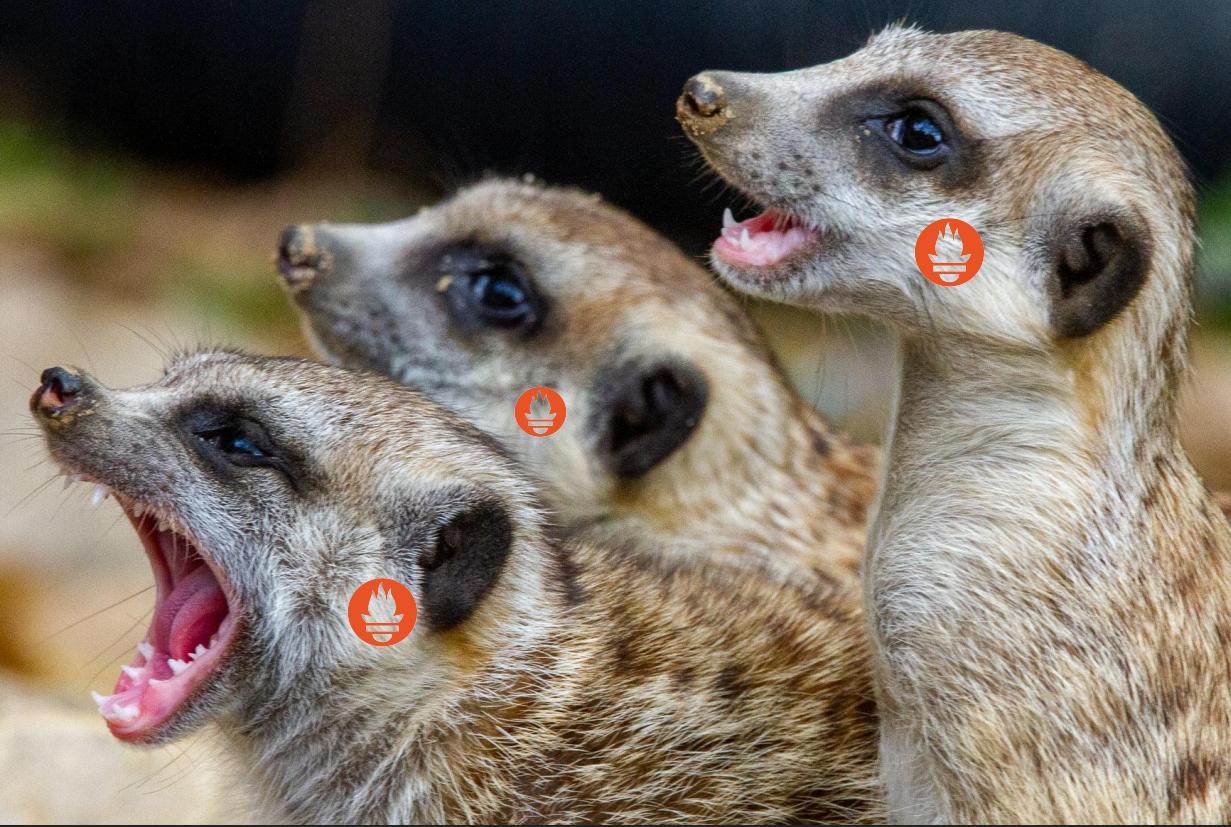
Node failures

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Alertmanager takes notice

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Prometheus alarms are triggered

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Pagerduty goes off

Photo Attribution: [howler monkeys doing their thing](#) under CC BY-SA 2.0

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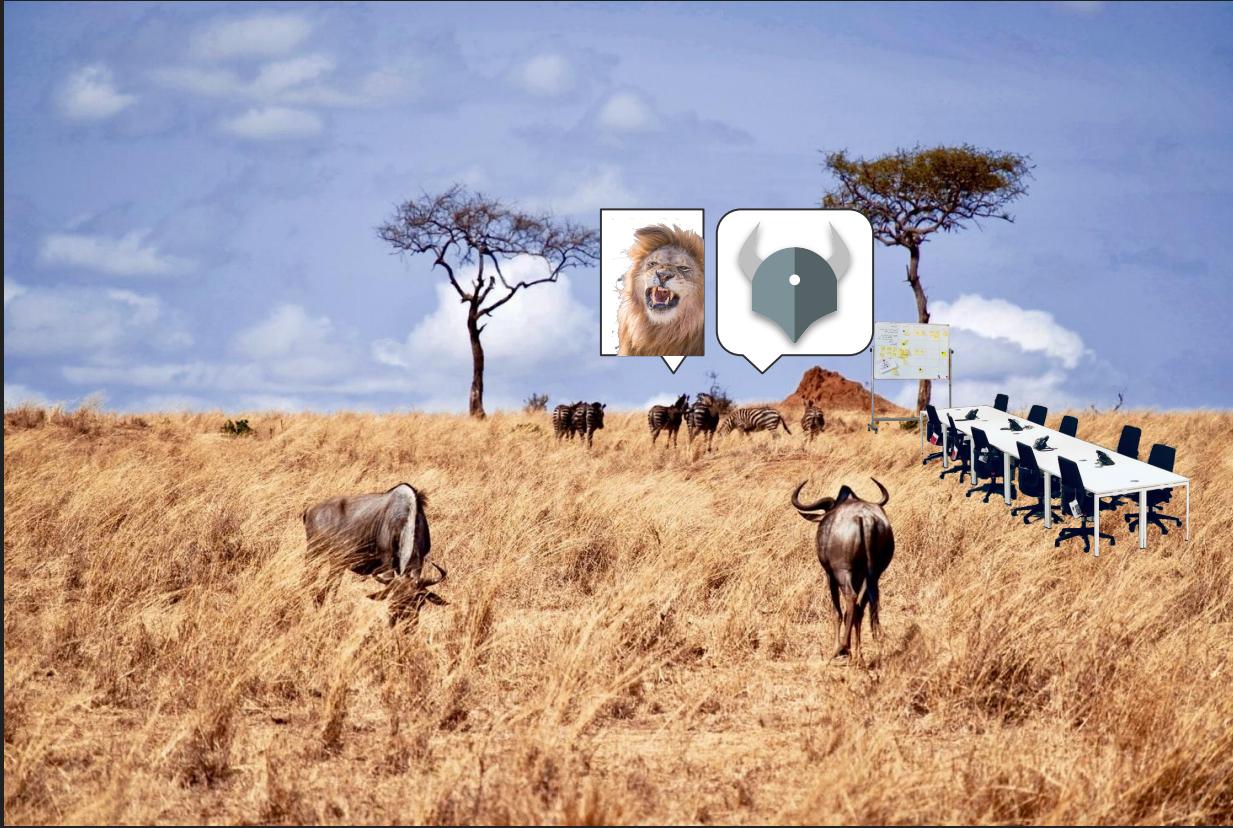
Oncall gets paged

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The cluster survives through resiliency

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So many meetings

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Episode 2: Birds Of Prey

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The previous cluster was under watch

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Nigel.

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Bad decisions propagate

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Unwanted visitors

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Looking for easy prey

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The red team finds flaws

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A compromised cluster is lost

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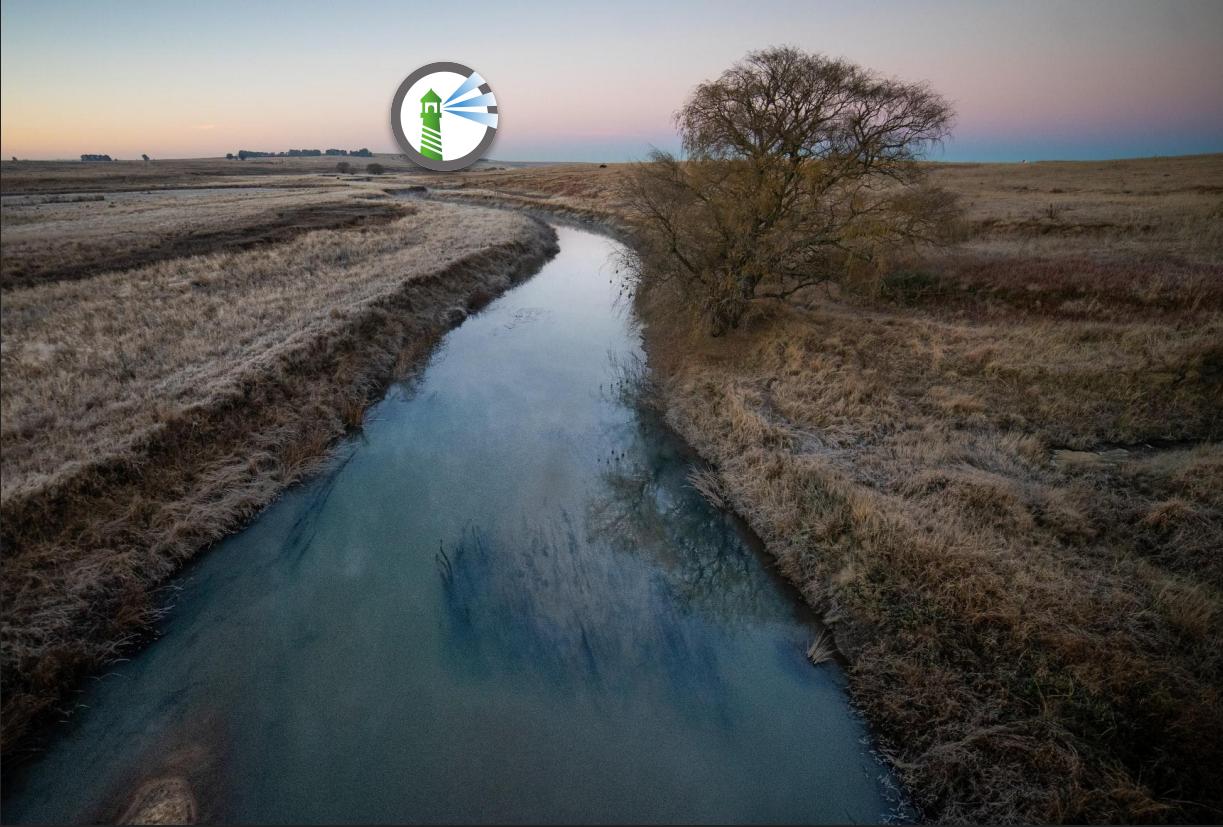
The lake is drunk dry

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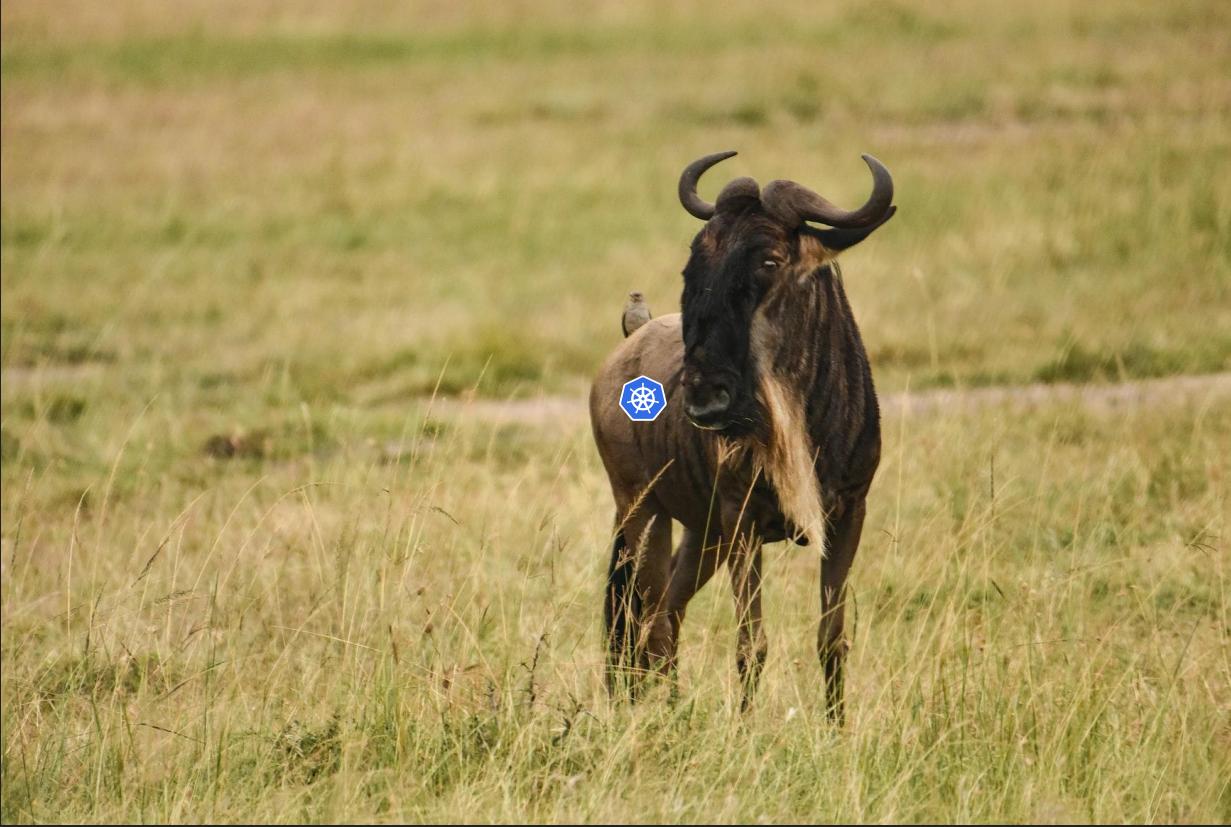
The blue team responds

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Harbor upstream

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Bertram.

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Close, but separate

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Not exactly what they were after. (*Sad Trombone*)

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Forever circling

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Episode 3: Exploration

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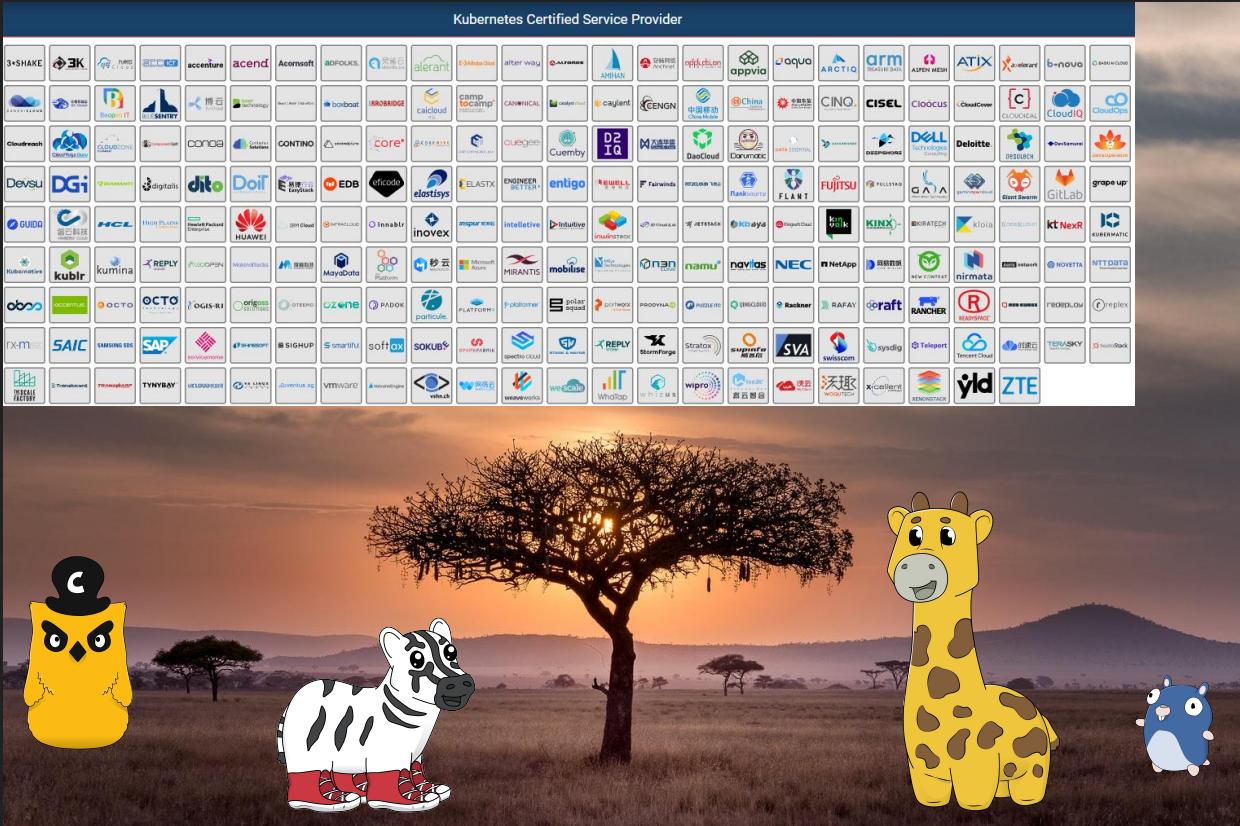
So much to offer

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Use a map. Visit: <http://landscape.cncf.io>

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Cloud Native trail guides

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Service Meshes

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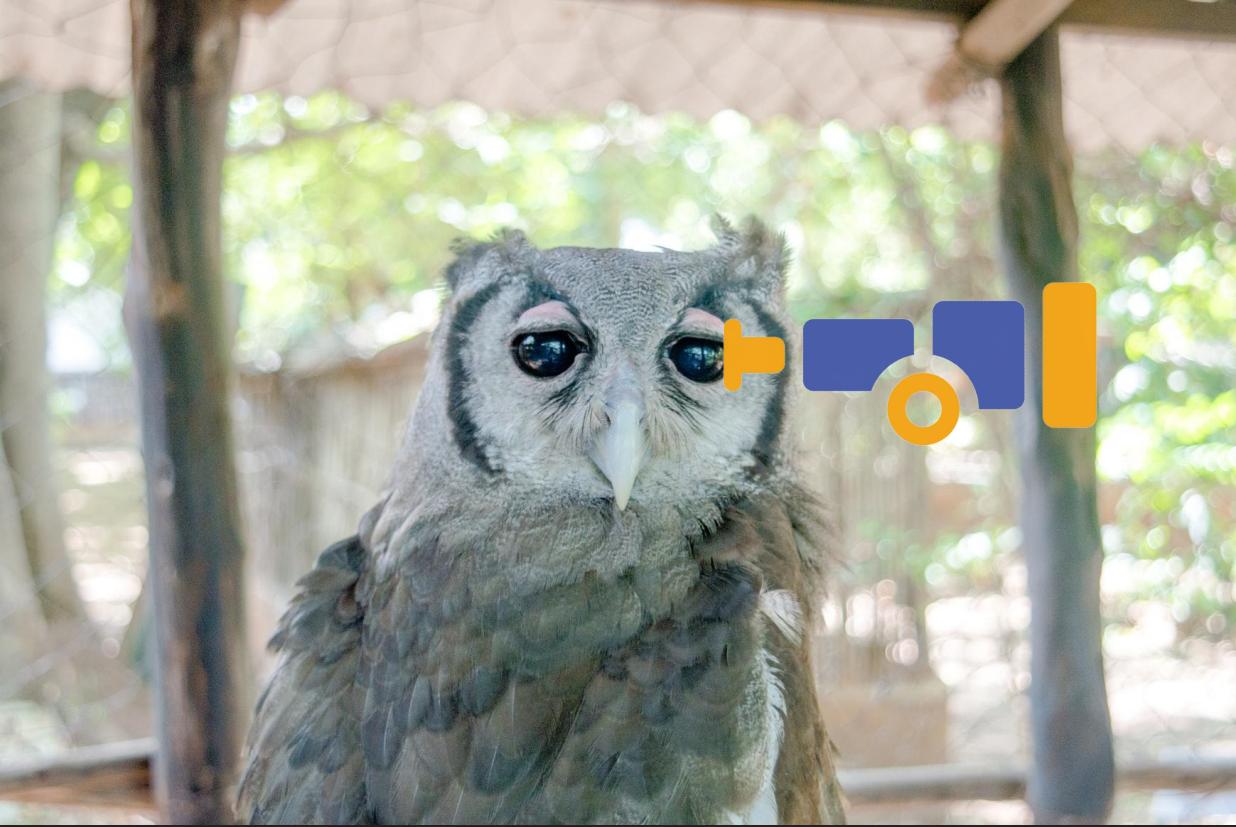
or maybe GitOps

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It's always DNS

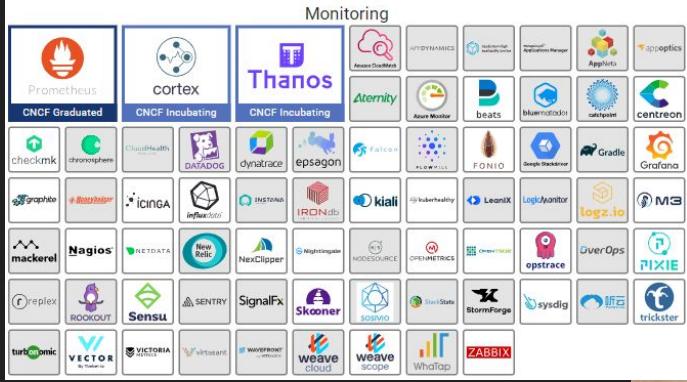
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Observability is getting hard to see



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Monitoring

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Rock the Sandbox

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A world of wonders awaits

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Meetups and Ambassadors

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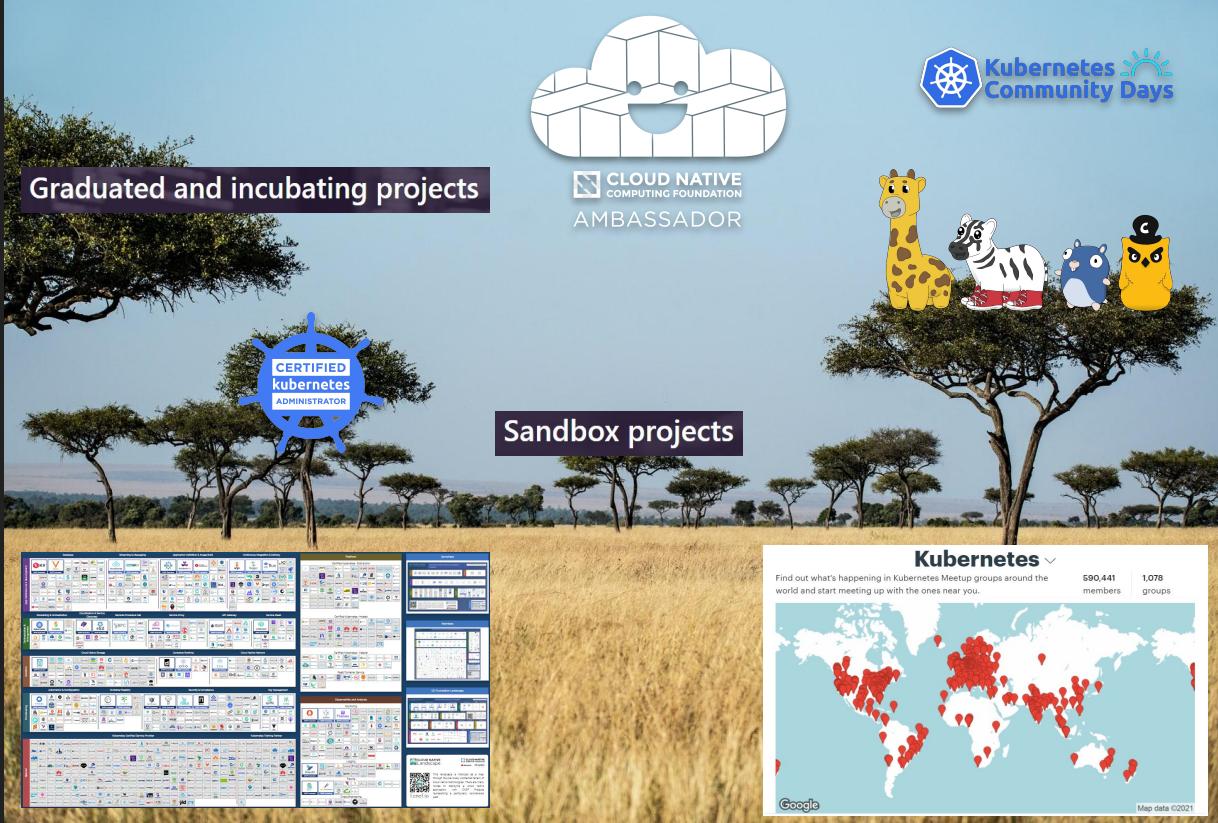
Cloud Native is much safer than the real Savanna

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Cloud Native is much safer than the real Savanna

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Good things across the whole ecosystem

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Twitter: @Noah_Abrahams



We'll see you next time...

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Epilogue

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Who Am I?

- Open Source Advocate at StormForge
 - (Half OSPO, Half Dev Advocate)
- CNCF Ambassador
- Las Vegas Kubernetes
- Been doing this Cloud thing for about 13 years
- Bouncing back and forth between high level and “in the trenches”



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Why Did I Make This Absurd Talk?

- Started with a tweet about keynote entrance music
- I love Nature shows
- Analogies are important, as we build our own personal stories
- It's easy to get lost in the immensity of the ecosystem, so a few starter patterns and scenarios are good to call out, both to achieve and avoid.

Why Did I Make This Talk Absurd?

- I think I'm funny, a handful of you may agree
 - Maybe fewer than at the start of the session
- I really wanted to do some impersonations on stage
 - No, I decided against a Steve Irwin impression
- So you'd remember it
- It's been a while since we were all together... you deserved some fun

Points to Remember

- This is a living, breathing ecosystem.
- It is important to care for all these resources.
 - “Cattle vs Pets” is a dangerous analogy
- One of the greatest principles of conservation is teamwork
 - Cooperation is more important than Competition
 - Applies to both sides, from planting trees to running conferences
- They are tied together to the physical ecosystems
 - Data Centers emit >100 million metric tons of CO₂ per year
- This was a tongue in cheek, fun talk, but the real issues (from both the technical and ecological sides) are serious

Apologies to

- Sir David Attenborough
- The National Geographic Society
- Public Broadcasting
- Viewers like you!

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Questions, Comments, Recipes?

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