
Kubernetes multi-clustering

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Agenda

- What means multi-clustering?

Boring slide



At work

- Kubernetes Integration Engineer
- [@StorageOS](#) (CNCF)
- Operators, Schedulers, Controllers, Microservices all in Go

At all

- Many years of DevOps
 - OSS devotee
 - Known as [@mhmxs](#)
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What means multi-clustering?

Bullshit 1

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Bullshit 2

Lorem ipsum dolor sit amet

Bullshit 3

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Not clear, yet!

SIG Multicluster

Why we need multi-clustering?

One cluster is not a cluster

- Risky to manage Kubernetes
- Multi region HA
- Hybrid-cloud
- Blue-green upgrades
- Edge computing
- Multi-tenancy
- Compliances

One thing is sure

- Must be declarative
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Challenges:

Off-cluster side

- Network
- Storage
- Gateway
- Security

On-cluster side

- Multi mesh
 - Data locality
 - Synchronization
 - Failure detection
 - Tenant management
 - Handle multi arch
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Paradigms

GitOps

1. Git repo is the source of truth
2. Each cluster is individual
3. Doesn't solve Kubernetes installation

Declarative API

- One thing to rule them all
 - Federation, extends base resources
 - Cluster API, declarative cluster management
 - KCP, minimal API server with extended controllers
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CPaaS

- Control plane as a service
- One cluster is able to deploy several
- Self managed Kubernetes as a service

Virtual Kube

- User talks to something looks like Kubernetes
- Implementation can be anything
- Commercials like this

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Thank you!
Any question?