

# ClusterControl Kubernetes Database Operator Management:

Making K8s database operators  
practical for production

  
**several9s**

# Today's engineer

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Senior developer with extensive educational and professional experience developing complex CRM, ECM and backend orchestration systems and components. Key contributor, having most recently served as the ClusterControl's K8s Ops Panel lead developer.



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- Managing K8s database operator workloads with CC
  - Why, what and how
- Live demo
- Roadmap
- Q and A

# K8s Operator Management

## Problem 1: Running Databases in Kubernetes is Hard

- Configuring replicas
- Managing failovers
- Scheduling backups
- Handling version upgrades
- Monitoring replication lag
- Resizing storage

## Problem 2: Managing Database Operators is Hard

- Different CRDs
- Different configuration patterns
- Different status reporting
- Different upgrade path
- Each operator has learning curve

# ClusterControl as a Unified Orchestration Layer

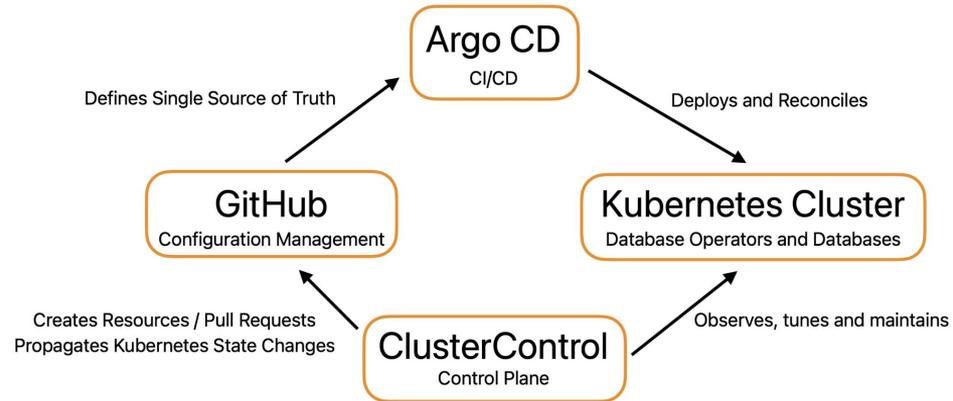
- A unified interface sitting above individual operators
- Single pane of glass for VM / K8s workloads
- Consolidated status and condition reporting
- Centralized observability
- Unified CRD model
- GitOps-native



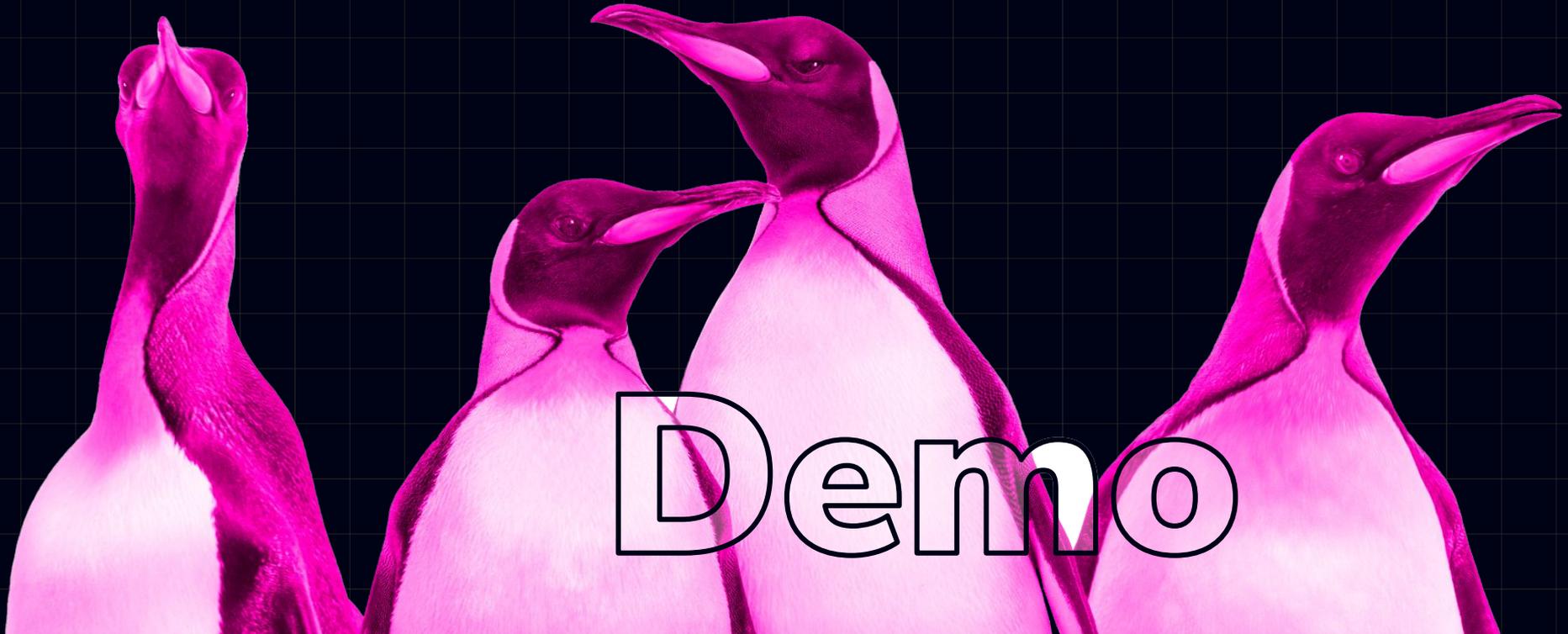
# GitOps as the Source of Truth for Your Infrastructure

You declare your desired state in Git, ArgoCD makes your cluster match it, continuously.

- Declarative — everything is described as code in a Git repository
- Versioned — every change is a commit, giving you full history, audit trail, and rollback
- Automated — ArgoCD running in the cluster watches Git and reconciles any drift



Live



Demo

# ROAD MAP

- Improve observability
- Support more operators
- Database user management
- GitOps improvements
  - More resources in repository
  - Support various providers
  - Bootstrap from git
  - Patching and overrides
  - Environment configuration

Q&A

# Thank you!

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