

Bringing Zabbix to Kubernetes, the Zabbix-Operator

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Intro

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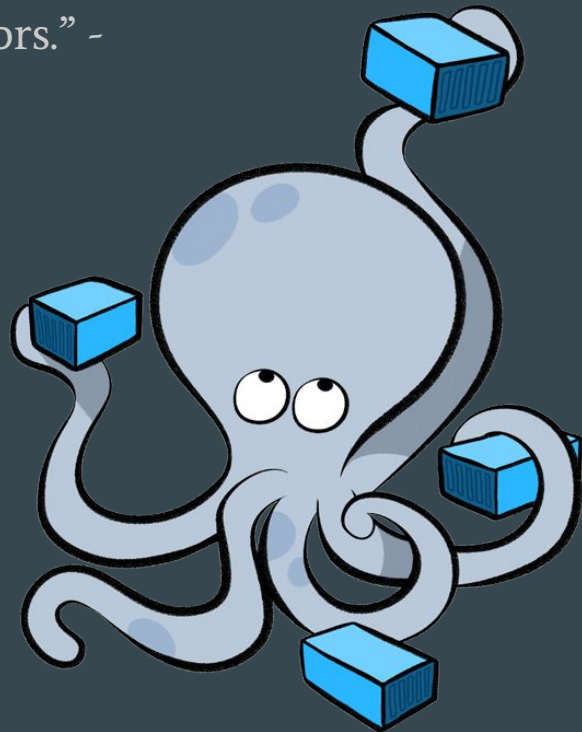
Twitter - @frenchtoasters3

Everything Else - @frenchtoasters



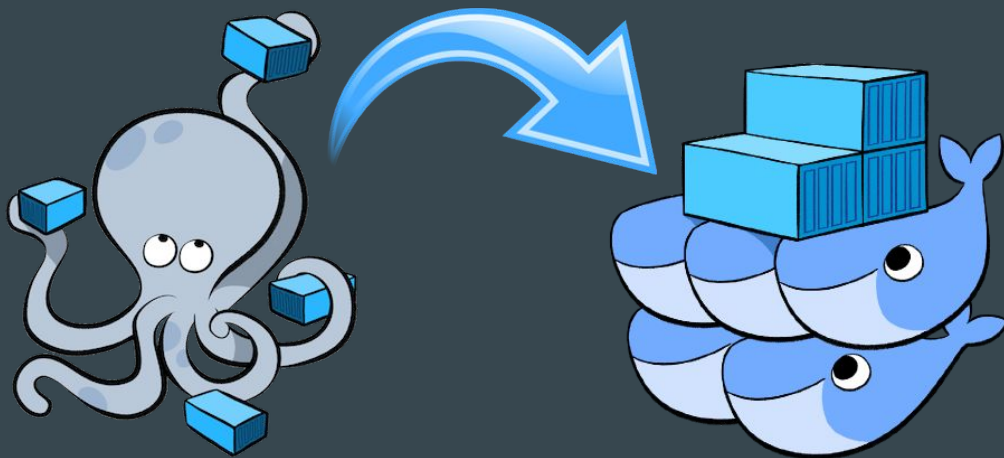
Kubernetes Operators

- “A place to put operational knowledge into software where previously that knowledge was held in the minds of administrators.” -
<https://operatorframework.io/>
 - CNCF Incubator Project
 - Started at CoreOS
- Operator-SDK
 - <https://github.com/operator-framework/operator-sdk>
- Types of Operator Bases
 - Ansible
 - Go
 - Helm



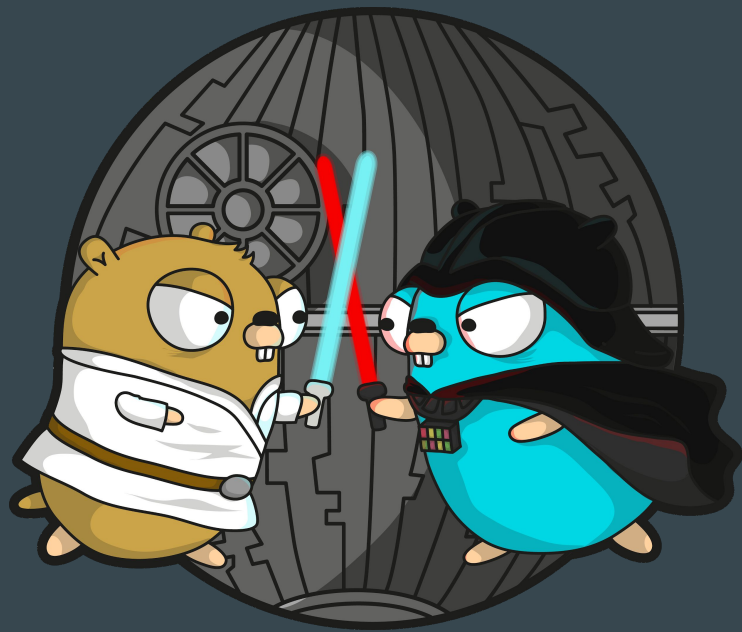
Define Zabbix Instance

- How?
 - Custom Resource Definition (CRD) - <https://kubernetes.io/docs/concepts/extend-kubernetes/api-extension/custom-resources/>
- What?
 - Container images
 - Database claim size
 - Replicas
 - Cluster Monitoring
 - Database Monitoring (Coming Soon)



The Guts

- Ansible based
 - Kubernetes-Zabbix Role
 - Docker-Compose -> Kompose -> Ansible Role
- Postgres Database Statefulset
 - Postgres base image + Zabbix schema pre-loaded
- Cluster Node Monitoring
 - Auto add cluster nodes
 - Deploy Prometheus Node Exporter
 - Requires Service Account with Cluster Scope
- Database Monitoring
 - Auto add Database container
 - Postgres Database monitoring template applied



Demo



Where?

<https://gitlab.com/frenchtoasters/zabbix-operator>

<https://www.zabbix.com/integrations/kubernetes>

<https://operatorframework.io/>

<https://github.com/operator-framework/operator-sdk>

<https://kompose.io/>

Questions?