Helm Users! What Can Flux v2 Do For You @yebyen and @r6by 2021-05-05

Outline

- Talk about Flux + Helm Controller
- Flux CRDs HelmRelease, Kustomization, (...)
- Demo During Slides (Narrow Expand)

DEMO

Blog on Kubernetes Live Activity

- flux bootstrap
- Kyverno
- Webhook Receiver
- Wordpress

DEMO

- (just kidding more)
- Live Activity
- Jenkins
- Okteto Terminal
- Linkerd2
- Flagger

flux bootstrap

- We will install all controllers
 - source controller
 - kustomize controller
 - helm controller

flux bootstrap

- We will install all controllers
 - notification controller
 - (image-automation)
- (image-reflector)

kyverno

Requirement to make Flux secure for multi-tenancy

(Keep Kubernetes safe from Wordpress)

fluxcd/flux2-multi-tenancy

Follow this carefully!

webhook

Receiver config allows Flux to sync instantly on git push

flux-system-receiver.yaml webhook-lb.yaml

webhook-receivers guide

Wordpress

Another application installed via Helm

<u>bitnami/wordpress</u>

Jenkins

Another application installed via Helm

jenkinsci/helm-charts

Terminal

Another application installed via Helm

okteto/terminal

Linkerd2

Not just another application

(Yes, Linkerd2 does provide Helm charts, but we don't install that way, we used arkade and linkerd2 cli)

linkerd getting started

arkade install linkerd

Flagger

Progressive Delivery with Flux and Flagger

Another project in the FluxCD umbrella

Depends on Linkerd2 (option Istio, AWS App Mesh, nginx...)

Flux2 Kustomize Helm

<u>fluxcd/flux2-kustomize-helm-</u> example

Example how to manage multiple clusters

(eg. staging, production)

We wanted to show you so much more

- Mozilla SOPS
- Secrets Management mozilla-sops guide

We wanted to show you so much more

- image-automation
- image-reflector-controller

Automate image updates to Git

We wanted to show you so much more

 <u>arkade</u> - opinionated helm packages

Curated Constellations - make your own, or borrow opinions of others :) we show you ours

We wanted to show you so much more

cert-manager

Let's Encrypt certificates

<u>cert-manager.io website</u> <u>cert-manager.io/docs</u>

We wanted to show you so much more

- Ioft-sh/kiosk
- Ioft.sh

Manage **multi-tenancy** another way

We wanted to show you so much more

- ingress configuration
- (We used <u>nginx-ingress</u>)

We wanted to show you so much more

Rabbit

A **presentation** tool for Rubyist

(neat tortoise/hare icons at the bottom of the slides!)

DEMO NOTES

Follow along at home - gist following these examples

bit.ly/32rUInK

bit.ly/32rUInK

JIT presentation! Instructions ready by the time you read this

Thanks

- Thank You (Audience) -Questions at the Flux Pavilion!
- Thanks to CNCF, Linux Foundation, Weaveworks
- Thanks to KubeCon and CloudNativeCon 2021 Organizers

Questions

Visit **Flux Pavilion** - meet us live after - Kingdon and Scott, Weaveworks DX Team

- After KCCNC EU 2021? Slack
- Supported by **Volunteers** around the world

CNCF: #flux and #flagger