2022-06-15 - EMCO: Deploying to target clusters (and public clouds) via git

Topic Leader(s)
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Topic Description

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GitOps tools such as fluxv2, ArgoCD and Anthos have the ability to periodically check Git repos for any updates, get hold of differences and apply only differences locally.

In this presentation, we will talk about how EMCO has evolved to interact with these tools for the sake of deploying applications to target cluster and public clouds.

Topic Overview

EMCO releases till now are able to synchronize the application & network-service resources to target K8s clusters via K8s APIs. Many cloud service providers and a few Telcos have started to use Git mechanism for placing application/network-service K8s services and letting the target cluster (via tools such as fluxv2, ArgoCD) to pull the resources from Git and apply those resources locally. GitOps tools such as fluxv2, ArgoCD and Anthos also have the ability to periodically check Git repos for any updates, get hold of differences and apply only differences locally.

A request to the EMCO team is to add all application/network-services collected via various controllers to the Git repositories and inform the target cluster. In this presentation, we will talk about how Azure Arc, Google Anthos and GitOps tools work, and EMCO Rsync and DCM design changes to support GitOps based target clusters.

Slides & Recording

Informational

EMCO GitOps (Porto DTF).pptx  video3671868259.mp4

Agenda

- A brief introduction about EMCO
- Instantiate/Terminate/Update sequence flows.
- Rsync role and its capabilities
- GitOps
- Azure ARC
- Google Anthos
- Akraino/ICN and fluxv2 based GitOps
- EMCO enhancements to support GitOps
- Target releases and roadmap
- Feedback and Q&A
Minutes

Action Items

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