



flux

FLUX V2 TRAINING SESSION

Jul 15th, 2021 Marco Amador

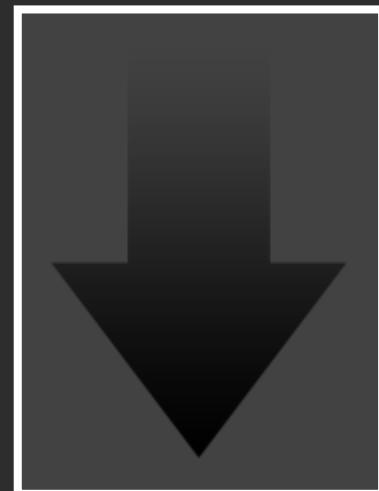


GITOPS

GitOps is a way of managing your infrastructure and applications so that whole system is described declaratively and version controlled (most likely in a Git repository), and having an automated process that ensures that the deployed environment matches the state specified in a repository.

FLUX V2

Core Concepts



SOURCES

A Source defines the origin of a repository containing the desired state of the system and the requirements to obtain.

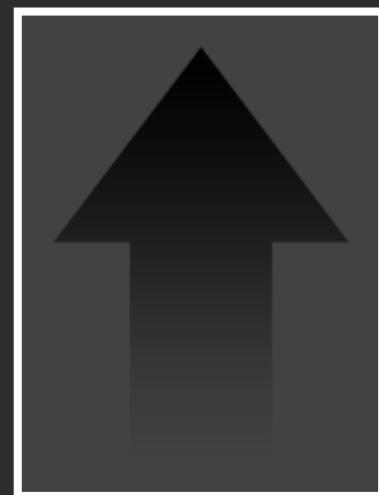
All sources are specified as Custom Resources in a Kubernetes cluster, examples of sources are *GitRepository*, *HelmRepository* and *Bucket* resources.

KUSTOMIZATION

The Kustomization custom resource represents a local set of Kubernetes resources (e.g. kustomize overlay) that Flux is supposed to reconcile in the cluster.

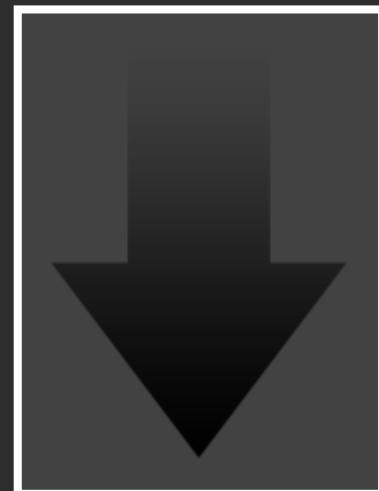
RECONCILIATION

Reconciliation refers to ensuring that a given state (e.g. application running in the cluster, infrastructure) matches a desired state declaratively defined somewhere (e.g. a Git repository).



FLUX V2

Core Components



SOURCE CONTROLLER

KUSTOMIZE CONTROLLER

HELM CONTROLLER

IMAGE REFLECTOR CONTROLLER

IMAGE AUTOMATION CONTROLLER

NOTIFICATION CONTROLLER



MAIN GIT SOURCE

```
1 apiVersion: source.toolkit.fluxcd.io/v1beta1
2 kind: GitRepository
3 metadata:
4   name: flux-system
5   namespace: flux-system
6 spec:
7   gitImplementation: libgit2
8   interval: 1m0s
9   ref:
10  branch: master
11  secretRef:
12  name: flux-system
13  url: ssh://git@ssh.dev.azure.com/v3/anovateam/Mapleleaf/c
```

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MAIN KUSTOMIZATION

```
1 apiVersion: kustomize.toolkit.fluxcd.io/v1beta1
2 kind: Kustomization
3 metadata:
4   name: flux-system
5   namespace: flux-system
6 spec:
7   interval: 10m0s
8   path: ./clusters/staging/northeurope
9   prune: true
10  sourceRef:
11    kind: GitRepository
12    name: flux-system
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MARVELOUS LIST

- No order here
- Or here
- Or here
- Or here

FANTASTIC ORDERED LIST

1. One is smaller than...
2. Two is smaller than...
3. Three!

TABULAR TABLES

Item	Value	Quantity
Apples	\$1	7
Lemonade	\$2	18
Bread	\$3	2

Community

The Flux project aspires to be the vendor-neutral home for GitOps in a Cloud Native world. What we achieved up until today is only possible because of our community.



GitHub Discussions

Join the conversation in GitHub Discussions. Everything Flux v2 related ranging from specifications and feature planning to Show & Tell happens here.



Slack

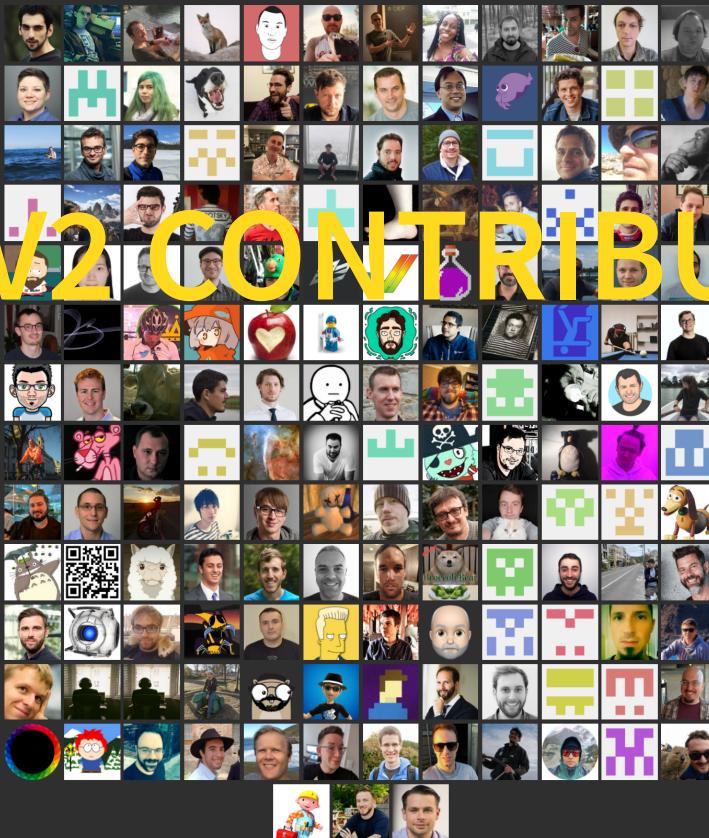
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Mailing list

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Meet our contributors



FLUX V2 CONTRIBUTORS

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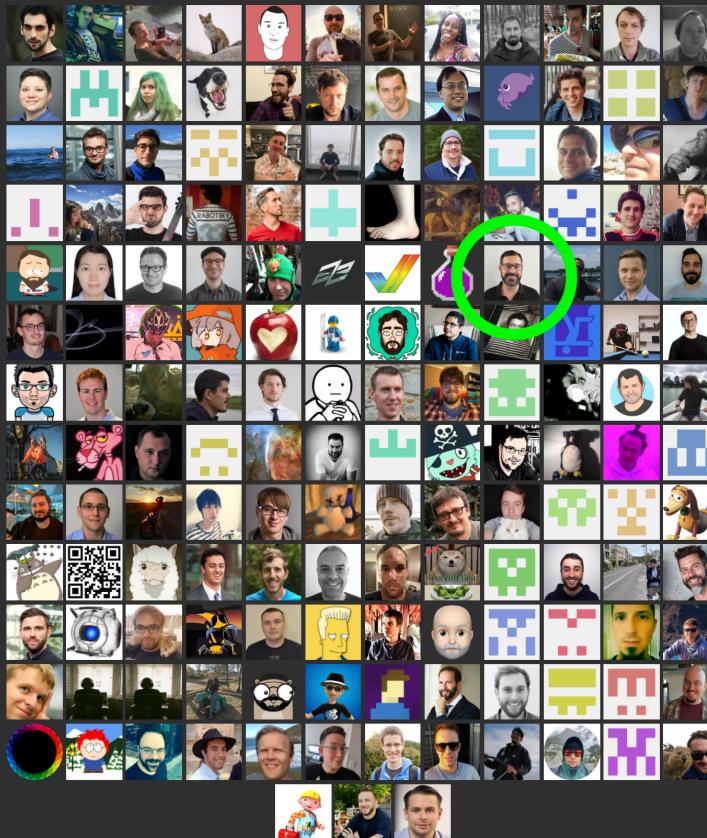


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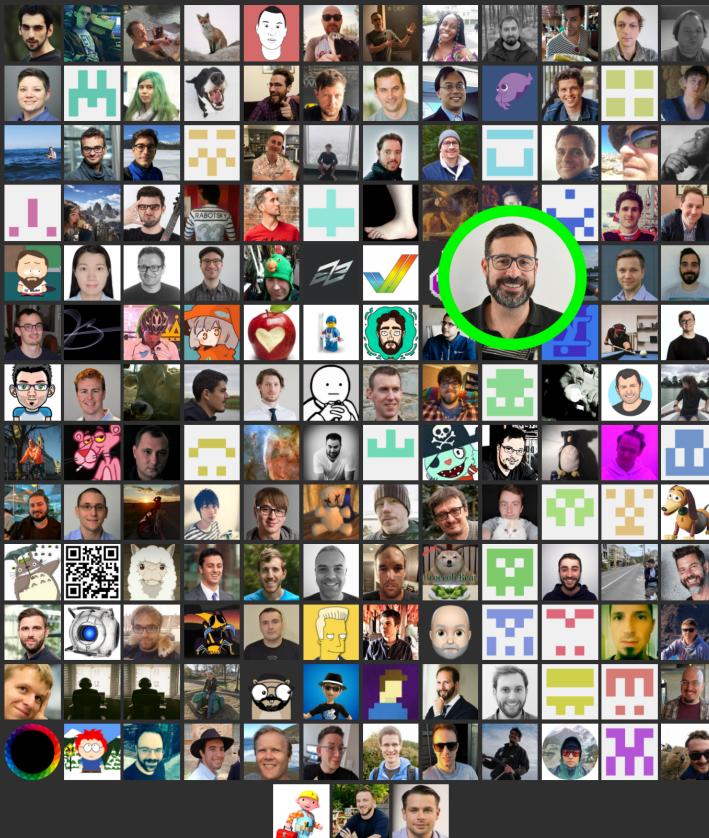


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END

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MArchimedes

END



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