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Forward Together »



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Virtual Flux project updates

Stefan Prodan, DX @ Weaveworks



Flux Timeline



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★ 2016 Flux started at Weaveworks

★ 2019 Flux joins CNCF Sandbox

★ 2020 Flux v2 & GitOps Toolkit started

★ 2021 Flux promoted to Incubation



40k+
Contributions
(26k+ since Sandbox)



1888
Contributors
(1569 since Sandbox)



14 Maintainers

In 5 companies
(6 Maintainers, 3 companies at Sandbox time)

Flux version 2



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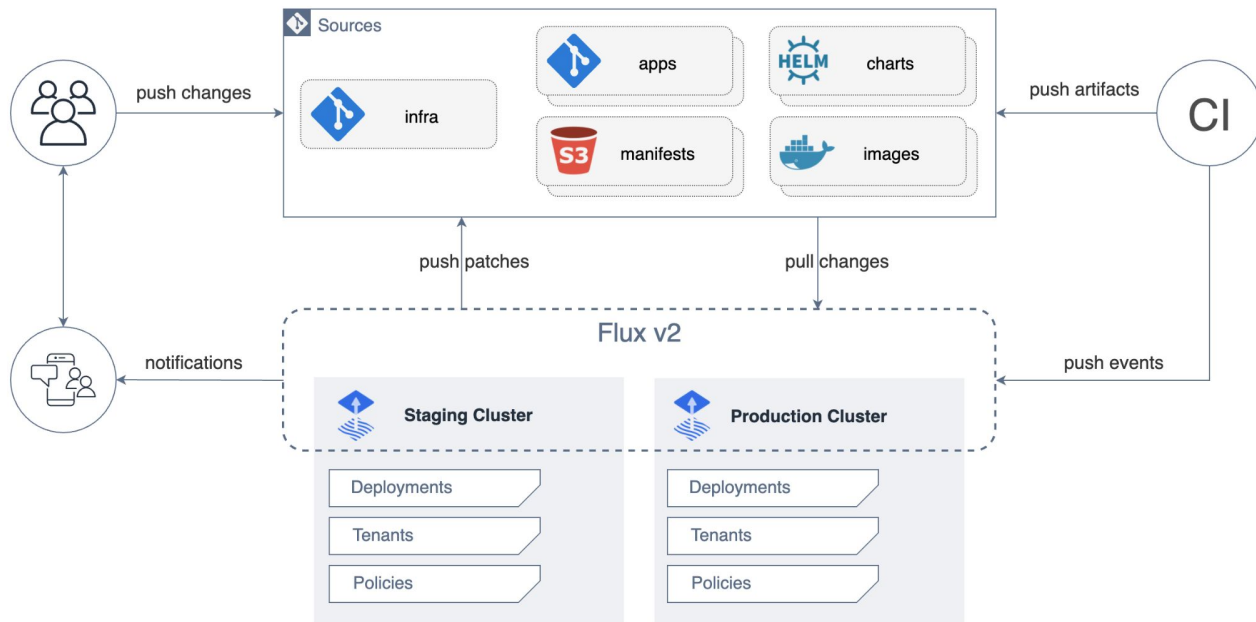


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Flux v2 aims to provide a complete Continuous Delivery platform on top of Kubernetes, supporting all the common practices and tooling in the field, e.g. Kustomize, Helm, ClusterAPI, metrics with Prometheus and so on.



GitOps Toolkit



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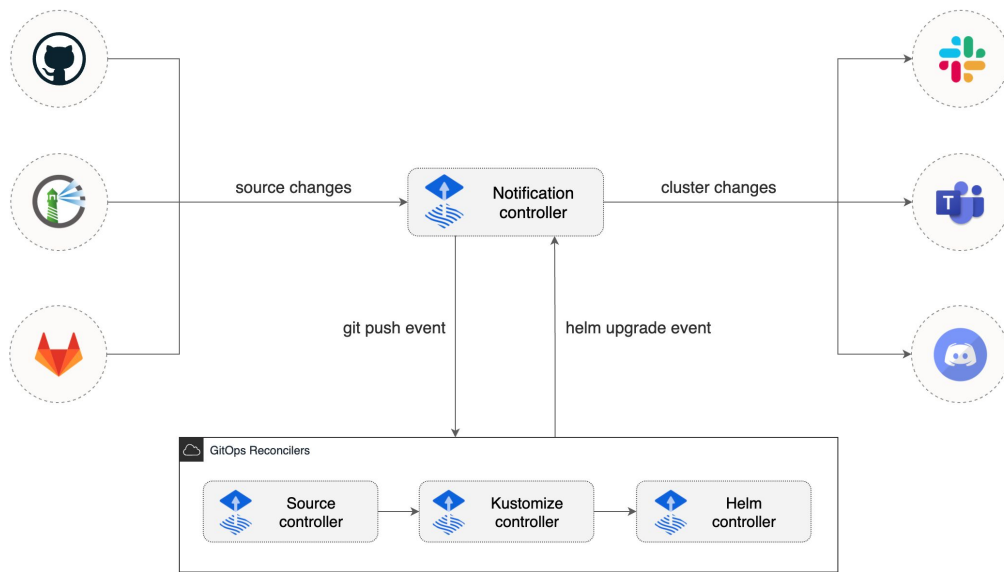
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The GitOps Toolkit is a collection of Go libraries, APIs and controllers for building declarative continuous delivery pipelines on top of Kubernetes.

Features

- ❖ Kubernetes-native
- ❖ Composable
- ❖ Extensible
- ❖ Secure
- ❖ Event-driven integration



Flux v2 Core Features



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- Multi-source (Git & Helm repos, S3-compatible)
- Built-in secrets management (SOPS, Cloud KMS)
- Multi-tenancy (Kubernetes RBAC & impersonation)
- Automated container image update to Git
- Multi-cluster (seamless ClusterAPI integration)
- Observability (events, metrics, alerts, dashboards)



flux

powered by [GitOps Toolkit](#)

Flux CLI & Terraform Provider



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One-click provisioning for:

- Git repositories
- Deploy keys
- Teams access
- Flux controllers

Git providers:

- SSH-agent
- GitHub
- GitLab

```
flux bootstrap github \  
  --owner=my-organization \  
  --team=my-sre-team \  
  --repository=fleet-infra \  
  --branch=main \  
  --path=clusters/prod-eu-central
```

```
provider "flux" {}
```

```
provider "github" {  
  owner = var.owner  
  token = var.token  
}
```

```
data "flux_install" "main" {  
  target_path = var.target_path  
}
```

```
data "flux_sync" "main" {  
  url           = "ssh://git@github.com/${var.org}/${var.repo}.git"  
  branch        = var.branch  
  target_path    = var.target_path  
}
```

Flagger joins Flux family



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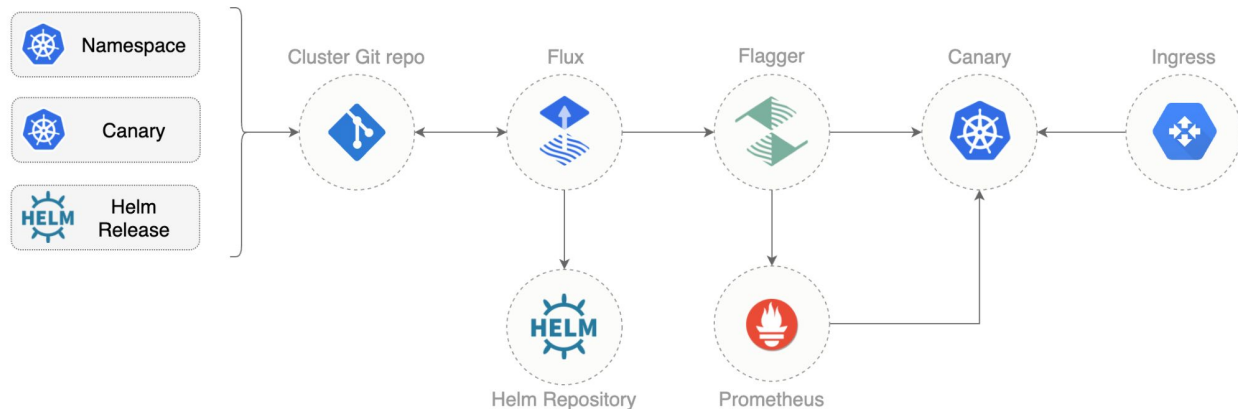
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Flagger is a progressive delivery tool that automates the release process for applications running on Kubernetes. Flagger comes with a declarative model for decoupling the deployment of apps from the release process.

Release strategies

- ❖ Canary
- ❖ A/B Testing
- ❖ Blue/Green



Flux Community



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Join the Flux discussions on CNCF Slack and GitHub

<https://github.com/fluxcd/flux2/discussions>

Hot Topics

- ❖ [Flux WebUI proposal](#)
- ❖ [Multi-tenancy improvements](#)
- ❖ [Manual Gating proposal](#)

