

Working with GitOps Tooling



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GitOps Tools Comparison

GitOps Tools Comparison

ArgoCD	FluxCD v2	Jenkins X
Rich web UI for easy visualization and management	Lightweight, cloud-native design	Complete CI/CD with GitOps
Multi-cluster support	Kubernetes-native with custom resources	Automated environment promotion
ApplicationSets for managing multiple apps	Modular GitOps toolkit	Preview environments for pull requests
Comprehensive health checks and sync policies	Strong Helm and Kustomize integration	Integrated security scanning

GitOps Tools Comparison

Aspect	ArgoCD	FluxCD v2	Jenkins X
Key strengths	<ul style="list-style-type: none">• Rich web UI• Multi-cluster management• ApplicationSets• Health checks and sync policies	<ul style="list-style-type: none">• Lightweight and cloud-native• Kubernetes-native CRDs• Modular components• Excellent Helm/Kustomize	<ul style="list-style-type: none">• Complete CI/CD and GitOps• Auto environment promotion• Preview environments• Integrated security scanning
Best for	<ul style="list-style-type: none">• Visual deployment management• Multi-cluster environments• Multi-tenant setups	<ul style="list-style-type: none">• CRD-based management• Helm-heavy workflows• Infrastructure-as-code	<ul style="list-style-type: none">• Complete CI/CD solution• Automated testing environments• Security-focused workflows

Choosing the Right GitOps Tool

ArgoCD

Choose if you need:

Visual GitOps tool
Ease of use
Rich visualization

FluxCD

Choose if you need:

Lightweight solution
CLI-first approach
Kubernetes-native

Jenkins X

Choose if you need:

End-to-end CI/CD
Opinionated platform
Automated pipelines



Demo: Deploying ArgoCD ApplicationSets



Demo: Installing and Configuring FluxCD