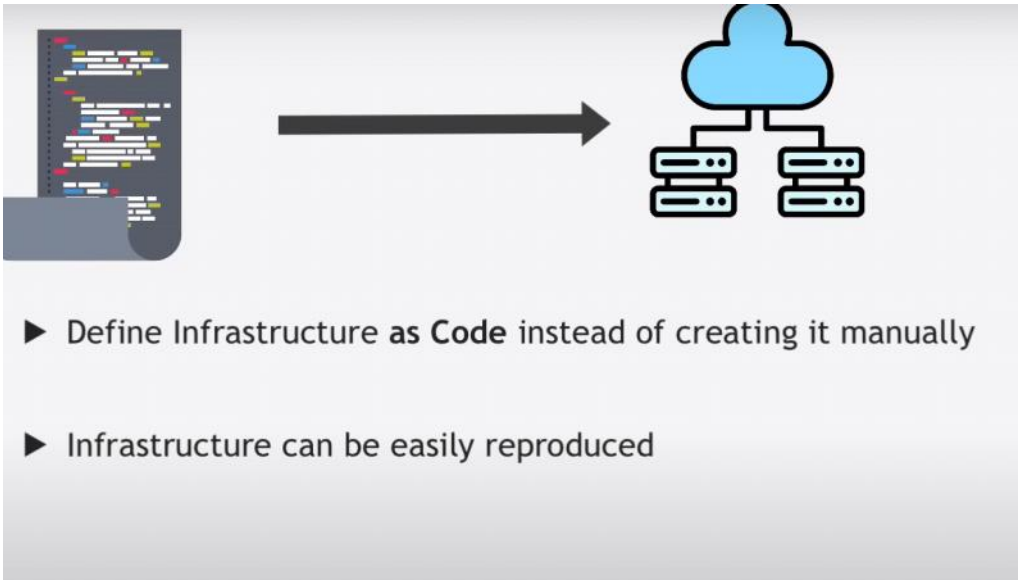
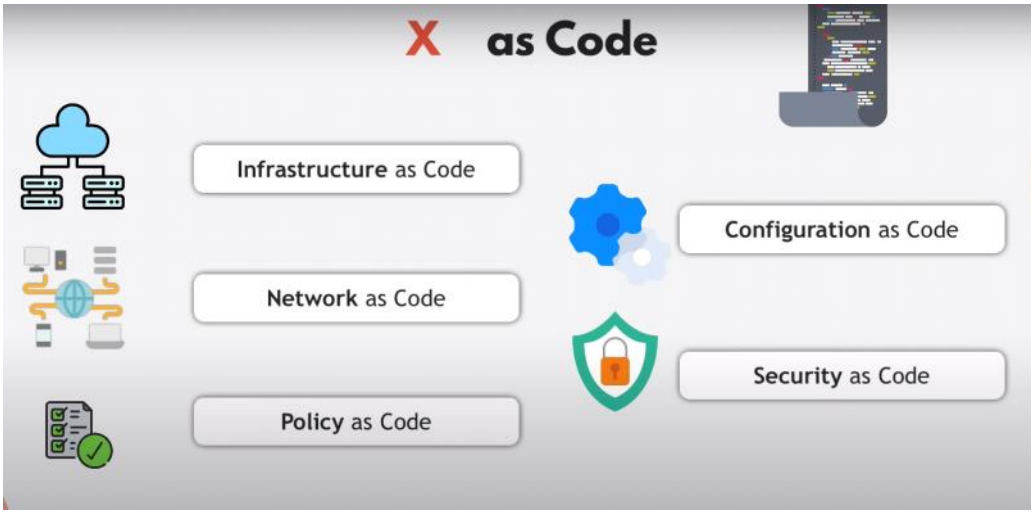
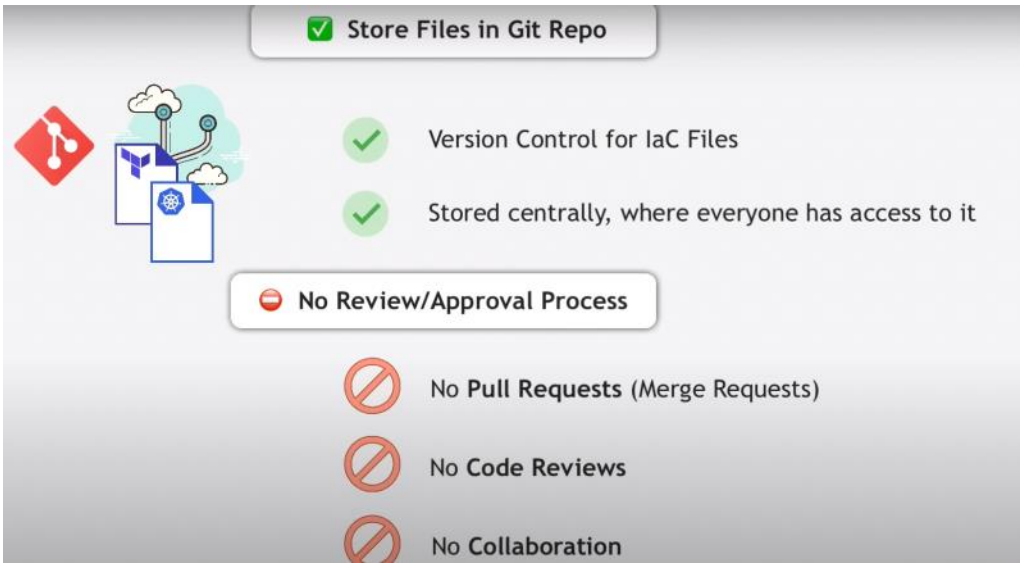
GitOPs

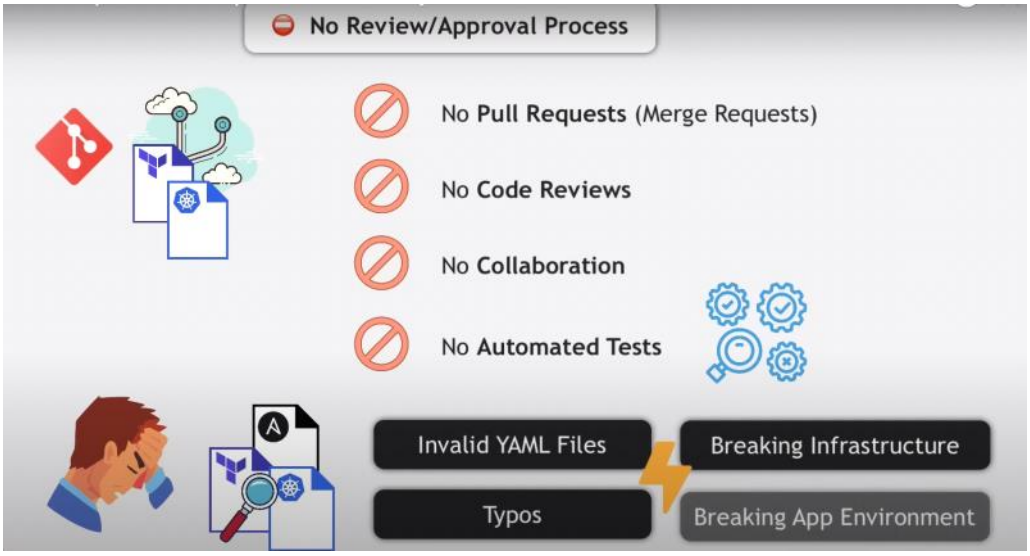
Thursday, October 12, 2023 4:20 PM

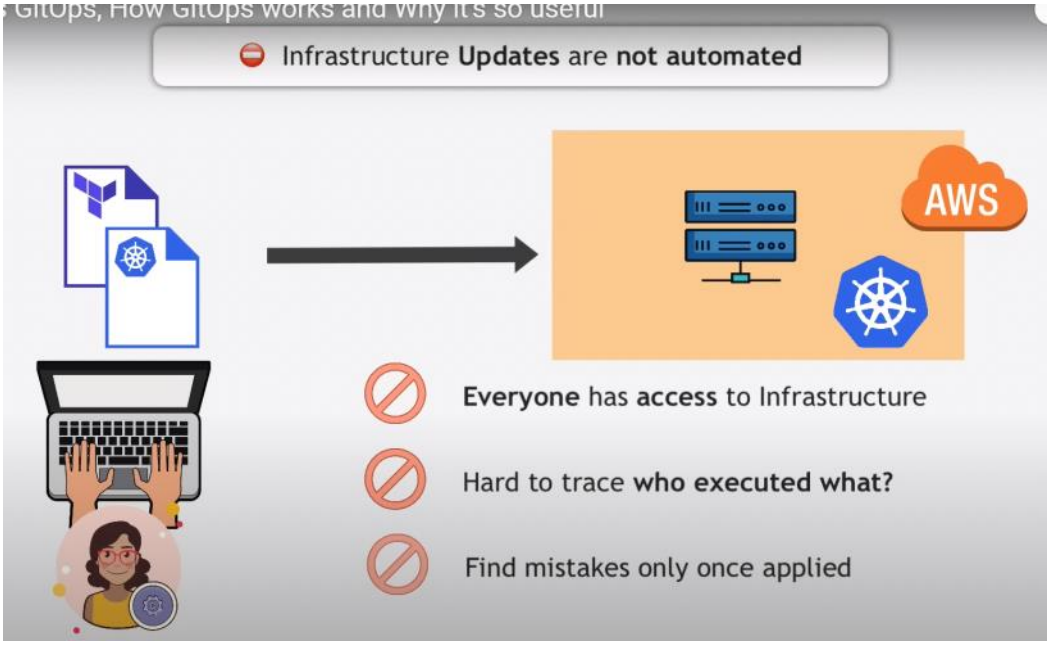




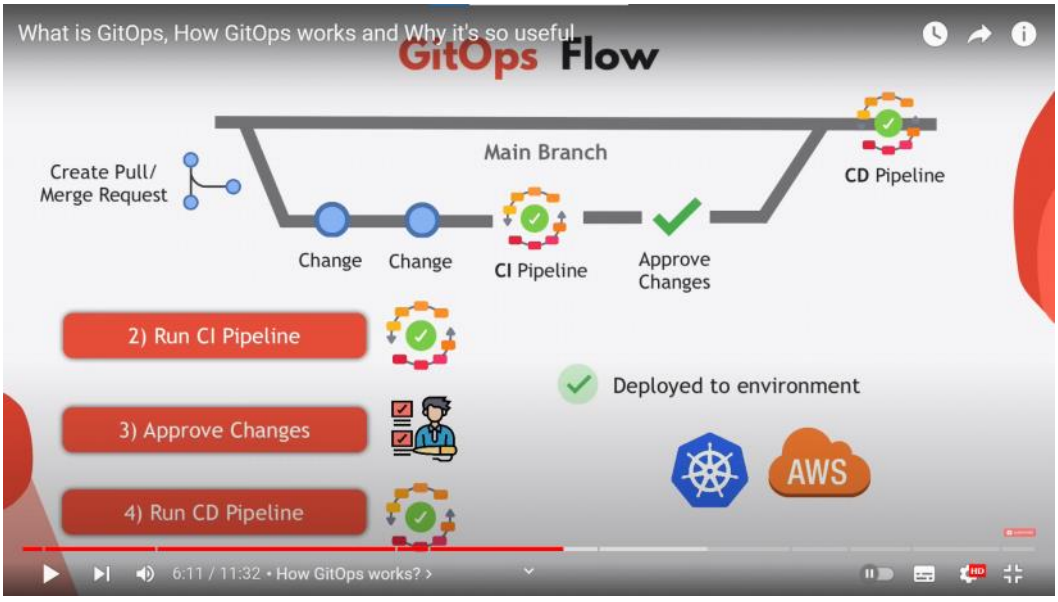
IAC as code wrong way

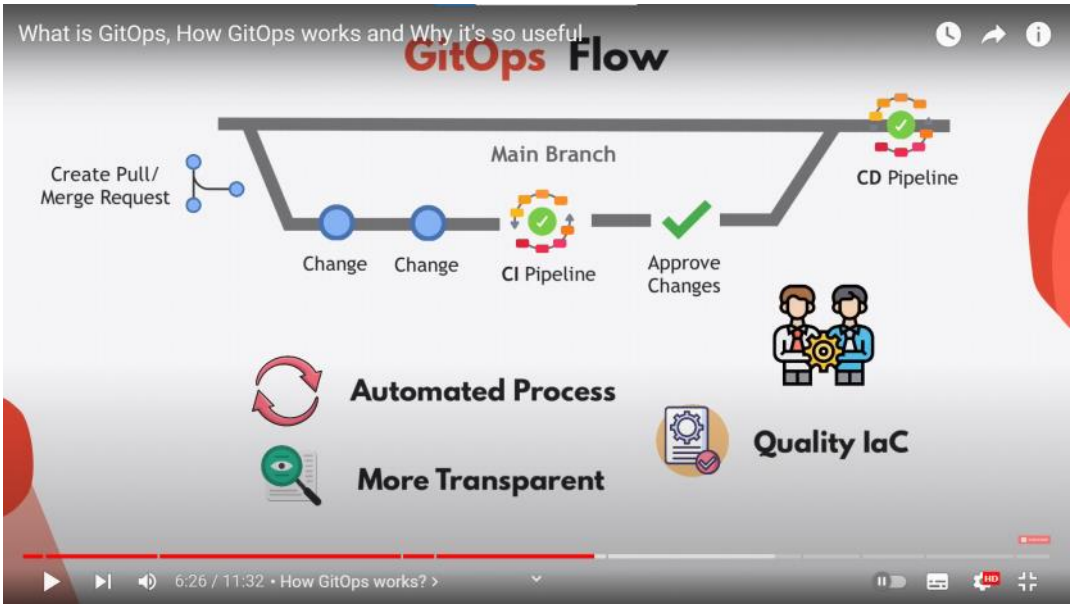


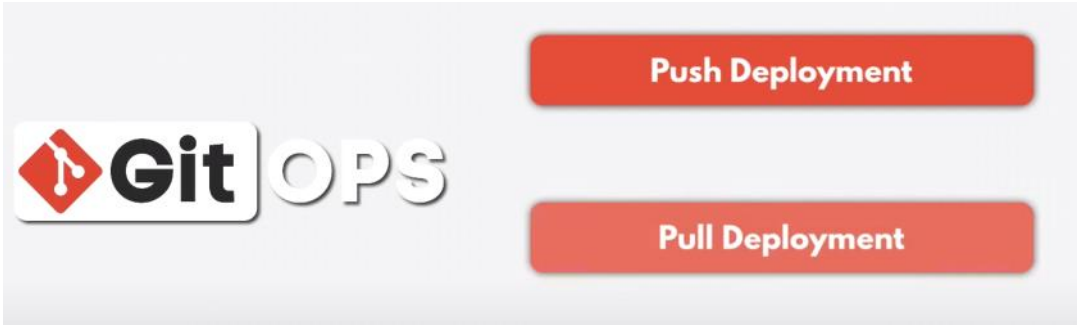


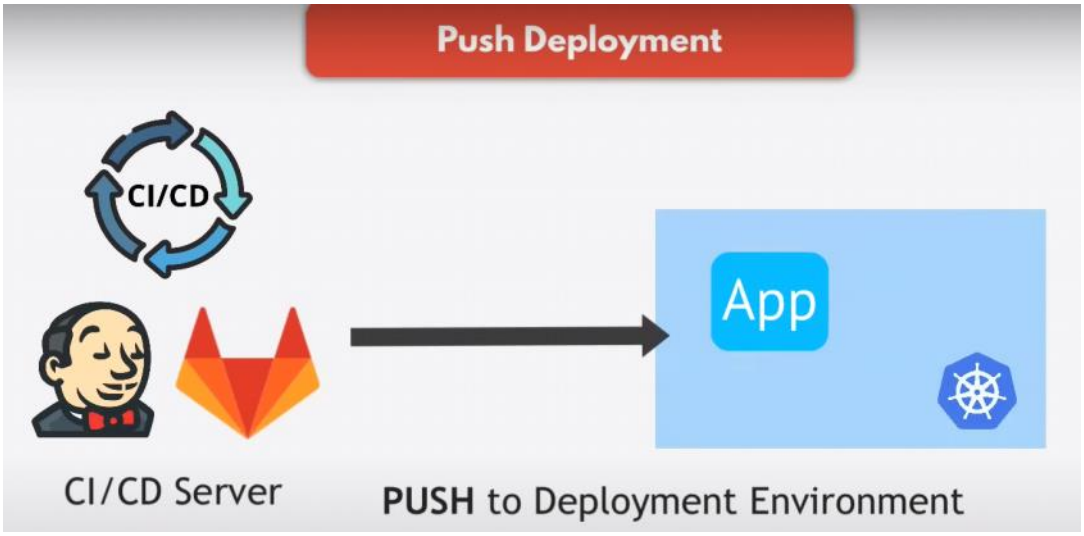


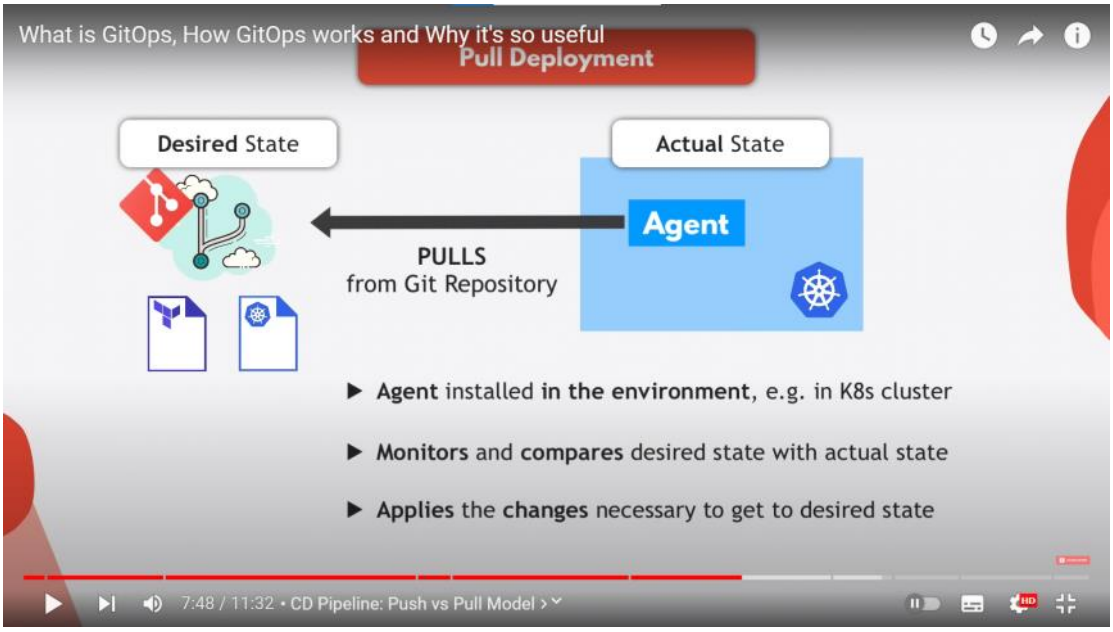
DOING IAC using GITOPS

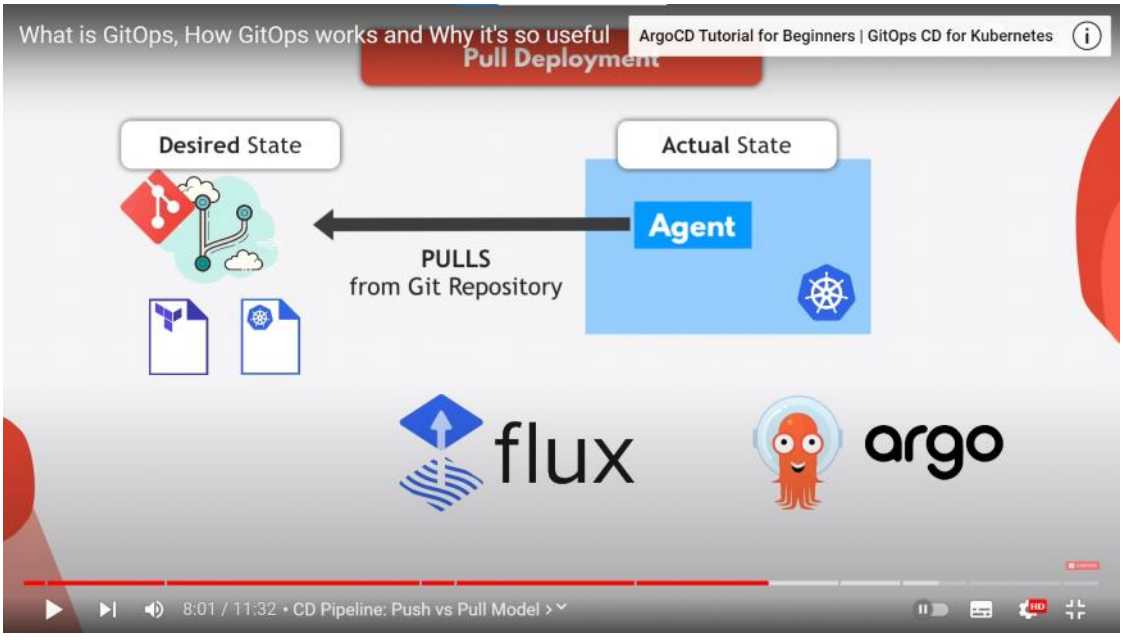

What is GitOps, How GitOps works and Why it's so useful
GitOps Flow
Create Pull/
Merge Request
Main Branch
CD Pipeline
Change
Change
CI Pipeline
Approve
Changes
2) Run CI Pipeline
Deployed to environment
3) Approve Changes
AWS
4) Run CD Pipeline
6:11 / 11:32 • How GitOps works? ›


What is GitOps, How GitOps works and Why it's so useful
GitOps Flow
Create Pull/
Merge Request
Main Branch
CD Pipeline
Change
Change
CI Pipeline
Approve
Changes
Automated Process
Quality IaC
More Transparent
6:26 / 11:32 • How GitOps works? ›

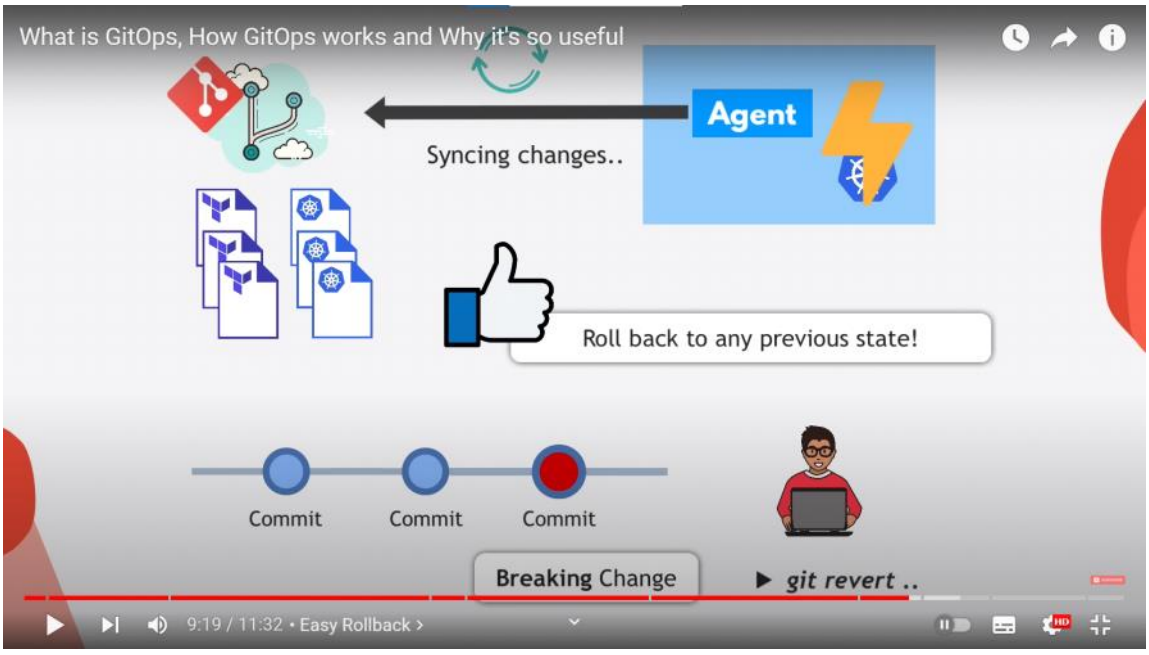

Git OPS
Push Deployment
Pull Deployment


Push Deployment
CI/CD
App
CI/CD Server
PUSH to Deployment Environment

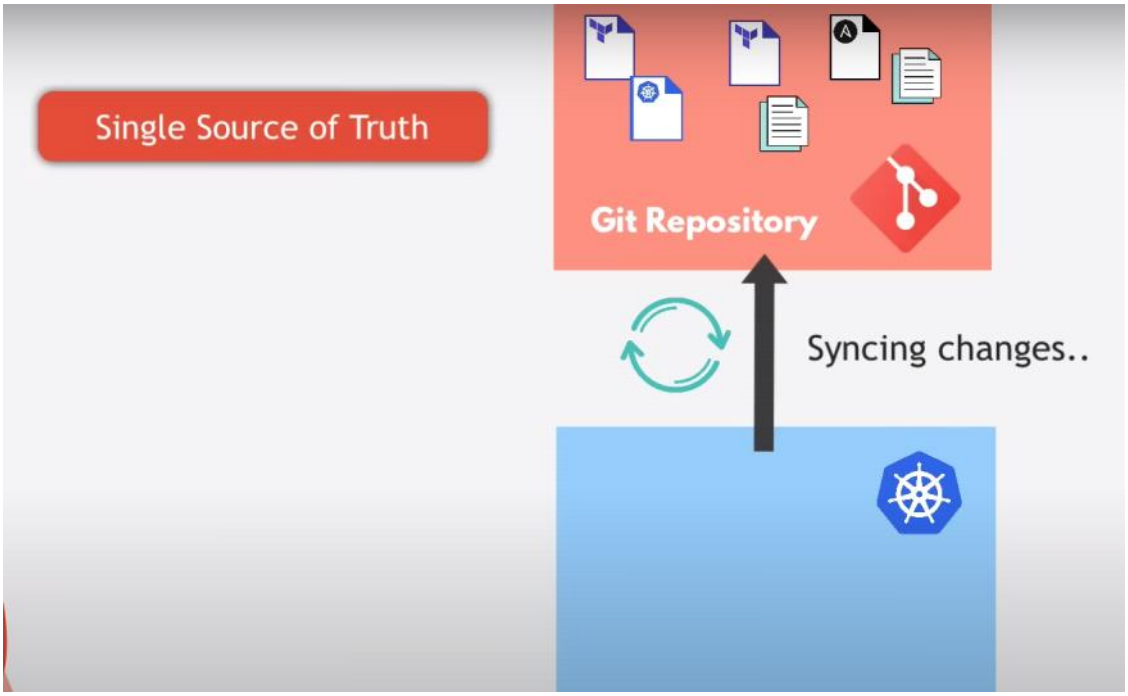

What is GitOps, How GitOps works and Why it's so useful
Pull Deployment
Desired State
Actual State
Agent
PULLS
from Git Repository
Agent installed in the environment, e.g. in K8s cluster
Monitors and compares desired state with actual state
Applies the changes necessary to get to desired state
7:48 / 11:32 • CD Pipeline: Push vs Pull Model >

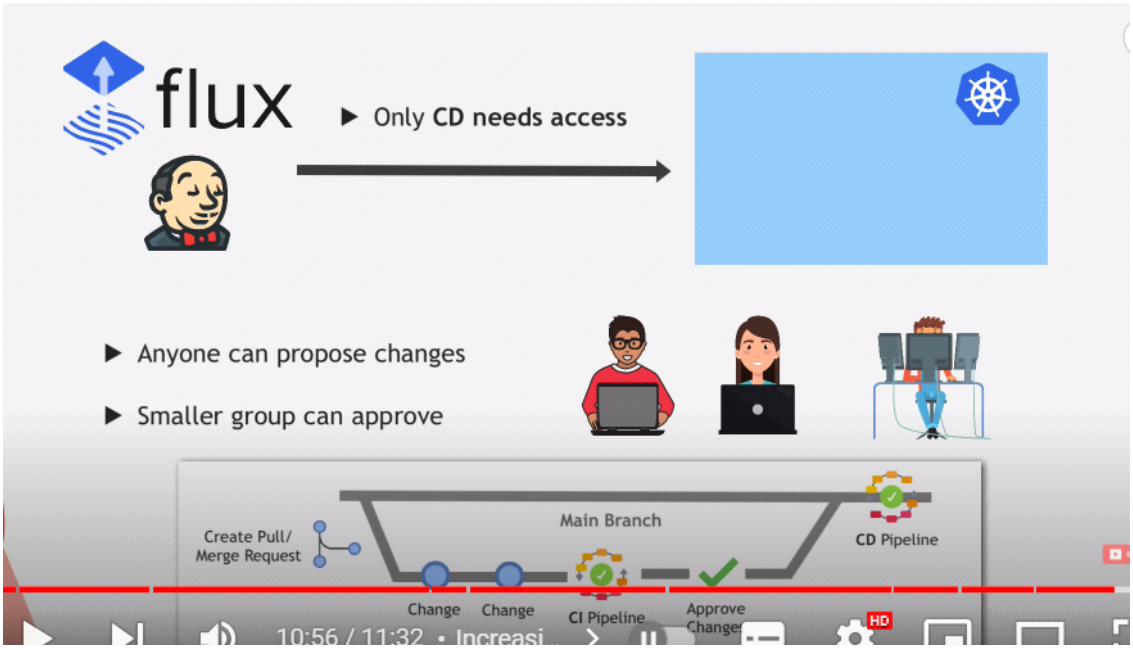

What is GitOps, How GitOps works and Why it's so useful
ArgoCD Tutorial for Beginners | GitOps CD for Kubernetes
Pull Deployment
Desired State
Actual State
Agent
PULLS
from Git Repository
flux
argo
8:01 / 11:32 • CD Pipeline: Push vs Pull Model >

Reverting Changes

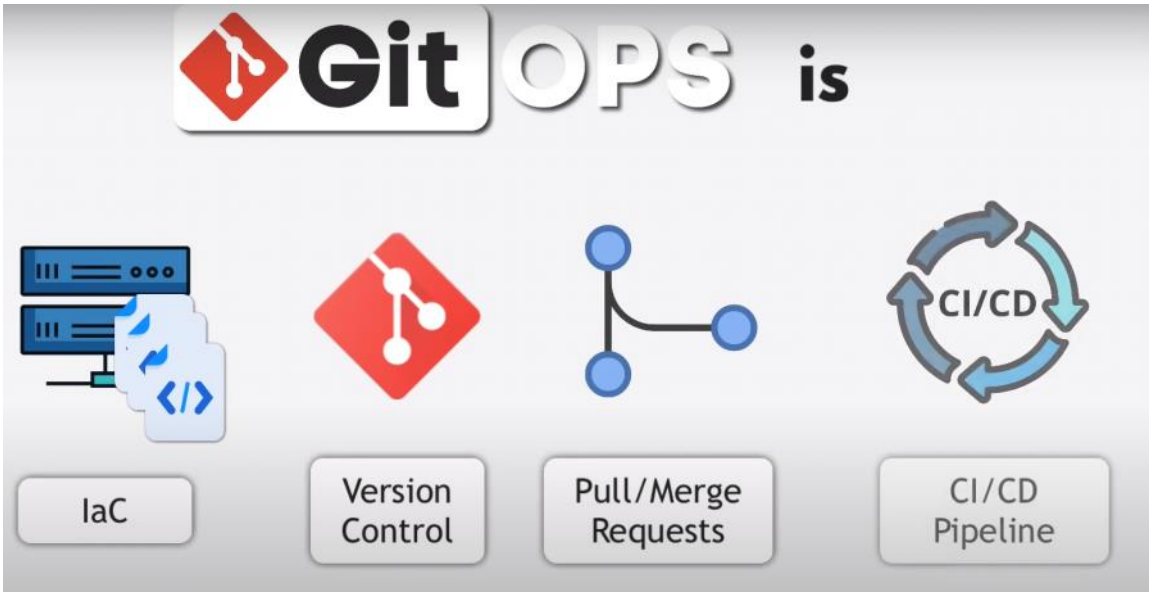


Git Repository == Single Source of Truth




flux
Only CD needs access
Anyone can propose changes
Smaller group can approve
Create Pull/
Merge Request
Main Branch
CD Pipeline
Change
Change
CI Pipeline
Approve
Changes
10:56 / 11:32 • Increasi...
HD

Less Permissions to Manage
More Secure Environment


GitOPS is
CI/CD
IaC
Version Control
Pull/Merge Requests
CI/CD Pipeline