AWS CodeDeploy Pipeline Setup Guide

# 1. Create GitHub Repo & Upload Code using Git Bash

A. Create GitHub Repo:  
- Go to https://github.com → Click "New Repository"  
- Set a repo name, choose Public/Private, and click Create Repository  
  
B. Upload Code via Git Bash:  
1. Open Git Bash where your code folder is located.  
2. Run the following:

git init  
git remote add origin https://github.com/YOUR\_USERNAME/YOUR\_REPO.git  
git add .  
git commit -m "Initial commit"  
git branch -M main  
git push -u origin main

# 2. Create EC2 Instance & Install CodeDeploy Agent

1. Launch an EC2 instance (Amazon Linux 2)  
2. SSH into the instance  
3. Run these commands:

sudo yum update -y  
sudo yum install ruby wget -y  
cd /home/ec2-user  
wget https://aws-codedeploy-us-east-1.s3.amazonaws.com/latest/install  
chmod +x ./install  
sudo ./install auto  
sudo systemctl start codedeploy-agent

# 3. Create IAM Roles

A. Role for EC2 (e.g., EC2CodeDeployRole):  
- Go to IAM > Roles > Create role  
- Choose AWS service > EC2  
- Attach policy: AmazonEC2RoleforAWSCodeDeploy  
- Name it: EC2CodeDeployRole  
  
B. Role for CodeDeploy (e.g., CodeDeployServiceRole):  
- Go to IAM > Roles > Create role  
- Choose AWS service > CodeDeploy  
- Attach policy: AWSCodeDeployRole  
- Name it: CodeDeployServiceRole

# 4. Attach EC2 Role to Instance

- Go to EC2 > Instances > Select your instance  
- Click Actions > Security > Modify IAM Role  
- Select EC2CodeDeployRole → Save

# 5. Create Application in AWS CodeDeploy

1. Go to CodeDeploy > Applications > Create application  
2. Name: MyApp (or any)  
3. Compute Platform: EC2/On-premises  
4. Click Create application  
  
Then, create a Deployment Group:  
- Name: MyDepGroup  
- Service Role: Choose CodeDeployServiceRole  
- Environment: EC2  
- Tags or Auto Scaling group to match your instance  
- Deployment type: In-place

# 6. Create CodePipeline

1. Go to CodePipeline > Create pipeline  
2. Name: MyPipeline  
3. Service role: New or existing  
  
Source Stage:  
- Provider: GitHub  
- Connect to your GitHub account  
- Choose the repo you created  
  
Build Stage (optional): Use CodeBuild or Skip  
  
Deploy Stage:  
- Provider: AWS CodeDeploy  
- Application name: MyApp  
- Deployment group: MyDepGroup  
  
Click Create pipeline