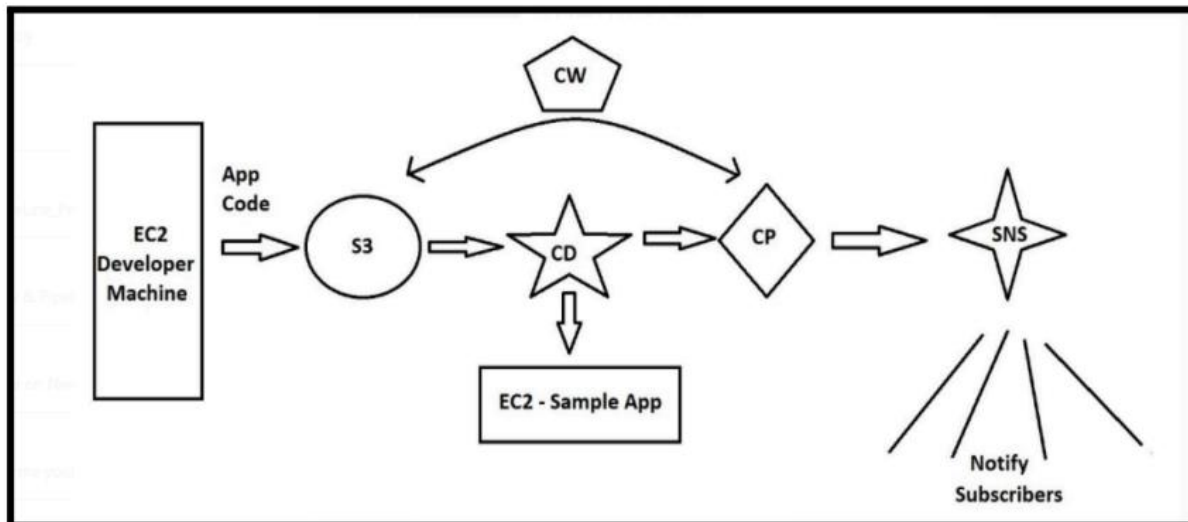


CODE PIPELINE:

AWS CodePipeline is a continuous delivery service that enables you to model, visualize, and automate the steps required to release your software. AWS CodePipeline then builds, tests, and deploys your application according to the defined workflow every time there is a code change.

CODE DEPLOY:

AWS CodeDeploy is a service that automates code deployments to Elastic Compute Cloud (EC2) and on-premises servers. Accelerating how fast a developer can release code allows him to release new features for an application faster and avoid deployment errors in complex applications.



CODE DEPLOY AND CODE PIPELINE PROJECT

Code Deploy and Code Pipeline project steps:

CodeDeploy is a deployment service from AWS which can automate application deployments to Amazon EC2 instances, on-premises instances or Lambda functions. This does a onetime deployment, for scheduling of deployment you may have to use AWS CodePipeline also.

Application: A CodeDeploy application can be defined from AWS CodeDeploy web console.

Revision: Represents the code need to be deployed on EC2 instance.

Appspec file: This contains the instruction to CodeDeploy, like copying of files, executing the scripts etc during the code deployment process. It is present in the root directory of unzipped code with name appspec.yml.

Deployment Group: Represent set of machines of Lambda function where code has to be deployed.

Deployment: The process of deployment.

Setup in Brief:

I have used two EC2 instance of AMZ2 Linux. First one is the web server we will be configuring, also called CodeDeploy agent. Second EC2 machine is supposed to use by developer where the codes are programmed. The names of the resources in the experiment are arbitrary and may name the resources your own.

1. Create IAM Roles for EC2-S3-CodeDeploy access.
2. Create IAM user account for developer
3. Install and prepare the CodeDeploy agent on webserver.
4. Create the code from Developer machine
5. Create Codedeploy Application and Push the code to S3 bucket from Developer machine
6. Create Deployment Group to include web server
7. Create Deployment to push the code to the Webserver
8. Test the website configuration

Services required:

EC2, S3, CodeDeploy, CodePipeline, CloudWatch, IAM, SNS

This project will be a valuable resource for anyone who wants to learn how to use AWS CodePipeline and CodeDeploy to automate their software delivery process.

Developer Tools

CodeDeploy

Source • CodeCommit

Artifacts • CodeArtifact

Build • CodeBuild

▼ Deploy • CodeDeploy

Getting started

Deployments

Deployment

Applications

Deployment configurations

On-premises instances

Pipeline • CodePipeline

Settings

Go to resource

Feedback

Success

Deployment created

Developer Tools > CodeDeploy > Deployments > d-11WHGNN28

d-11WHGNN28

Copy deployment

Retry deployment

Deployment status

Installing application on your instances

1 of 1 instances updated ✓ Succeeded 100%

Deployment details

Application	Deployment ID	Status
sampleapp	d-11WHGNN28	✓ Succeeded
Deployment configuration	Deployment group	Initiated by
CodeDeployDefault.AllAtOnce	code-deploy-grp	User action
Deployment description		
-		

Developer Tools

CodePipeline

Source • CodeCommit

Artifacts • CodeArtifact

Build • CodeBuild

Deploy • CodeDeploy

▼ Pipeline • CodePipeline

Getting started

Pipelines

Pipeline

History

Settings

Settings

Go to resource

Feedback

Success

Congratulations! The pipeline my-pipeline-gayathri has been created.

Developer Tools > CodePipeline > Pipelines > my-pipeline-gayathri

my-pipeline-gayathri

Notify

Edit

Stop execution

Clone pipeline

Release change

Pipeline type: V2

Execution mode: QUEUED

✓ Source Succeeded

Pipeline execution ID: [3ec0ab4a-3056-4074-be55-a2067d12c41e](#)

Source

Amazon S3

✓ Succeeded • Just now

View details

Source: Amazon S3 version id: lkwze_EeDRd3l2gr1QyCRUuQK97N.hJJ

Disable transition

✓ Deploy Succeeded

Start rollback

