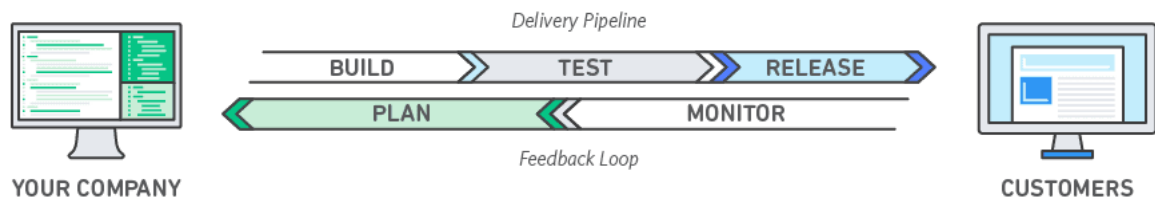# Deploy Web App From S3 Bucket To EC2 Instance on AWS Using CodePipeline

Before deploying a web application we should understand the basic concept of **Continuous Integration(CI)** and **Continuous Deployment(CD)** what are they and What kind of tools are offered by AWS for DevOps CI/CD practices.

Overview Of CI/CD

Continuous Integration(CI) and **Continous Deployment(CD)** gets rid of the traditional manual gate and implements fully automated verification of the acceptance environment to determine the scenario whether the pipeline can continue to production or not.
Continuous Integration focuses on the software development life cycle (SDLC) of the individual developer in the code repository. This can be executed multiple times with a primary goal to enable early detection of integration bugs, and errors.
Continuous Delivery focuses on automated code deployment in testing or production environment, taking the approval of updates to achieve automated software release process, pre-emptively discovering deployment issues.
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CI/CD Tools Offered By AWS Used In Case Study

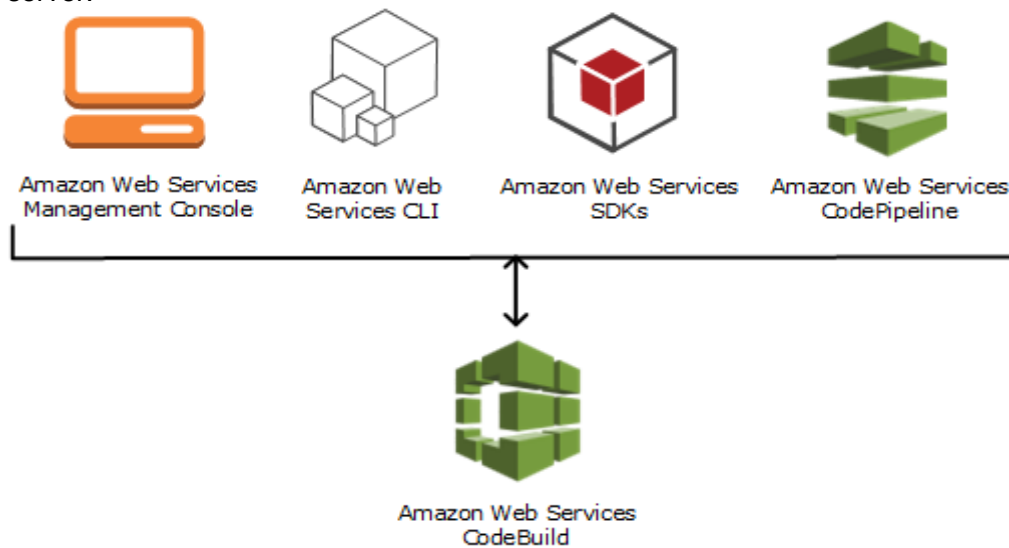AWS offers an end-to-end CI/CD stack comprised of the following four services:

AWS CodeCommit – It is a fully-managed source control service that hosts secure Git-based repositories. CodeCommit makes it easy for teams to collaborate on code in a secure and highly


scalable ecosystem.
AWS CodeBuild – A fully managed continuous integration service that compiles source code, runs tests and produces software packages that are ready to deploy, on a dynamically created build

server.

Amazon Web Services Management Console   Amazon Web Services CLI   Amazon Web Services SDKs   Amazon Web Services CodePipeline

Amazon Web Services CodeBuild

AWS CodeDeploy – A fully managed deployment service that automates software deployments to a variety of computing services such as Amazon EC2, AWS Fargate, AWS Lambda, and your on-premises servers.

CodeDeploy Flow
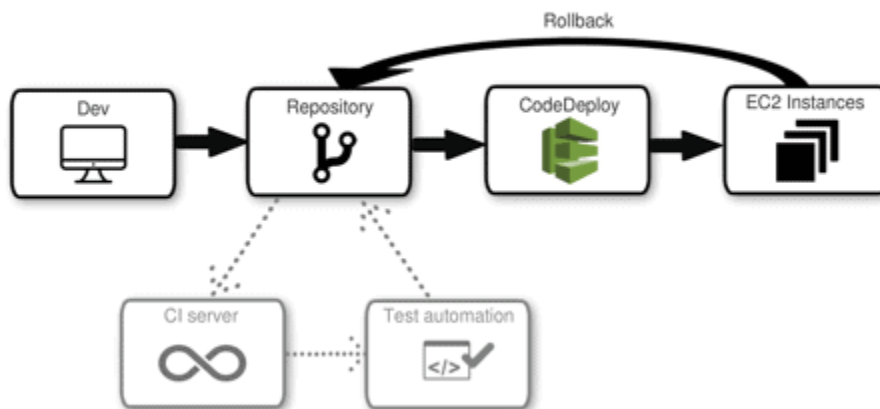
AWS CodePipeline – A fully configured continuous delivery service that helps the user to automate their released pipelines for fast and reliable application and infrastructure updates.
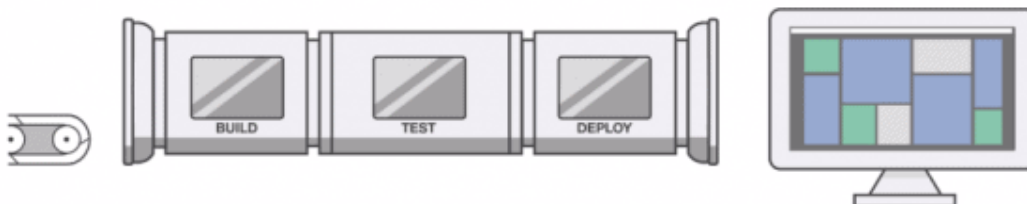
Typically in many organizations, there are many tools for code repository but we are using AWS S3 as a code repository.