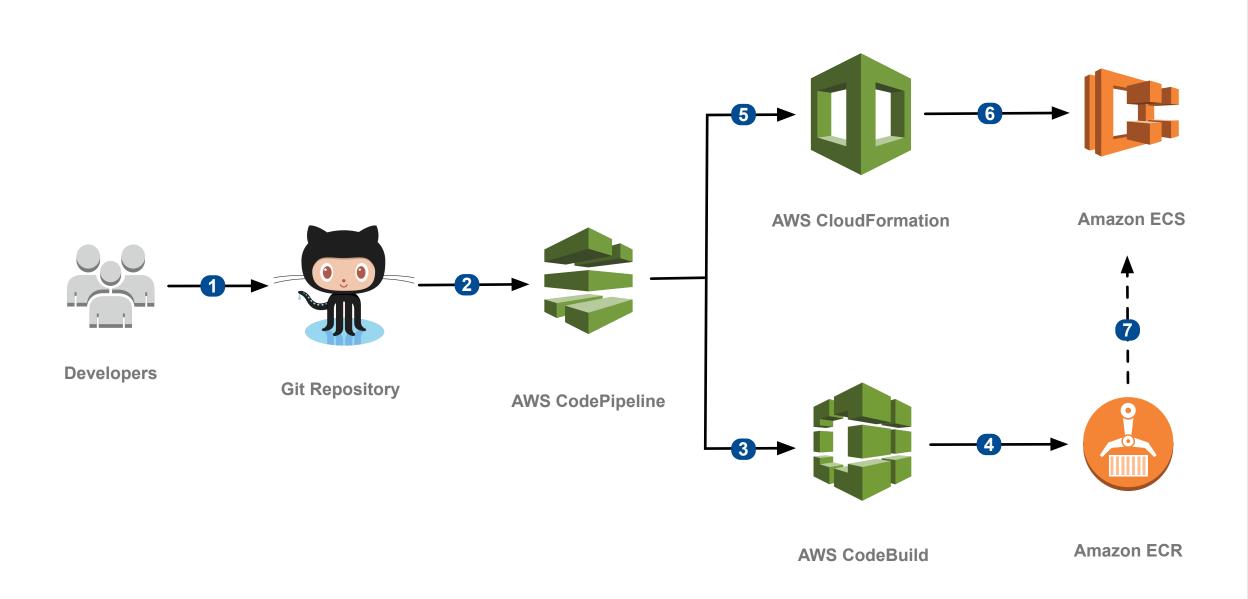# Amazon ECS Continuous Deployment

Build a continuous deployment pipeline for Docker containers

This diagram shows how to use AWS CodePipeline, AWS CodeBuild, and AWS CloudFormation to build an automated continuous deployment pipeline to Amazon ECR and Amazon ECS.

Developers

Git Repository

AWS CodePipeline

AWS CloudFormation

Amazon ECS

AWS CodeBuild

Amazon ECR

1. Developers continually integrate their changes together into a main branch hosted within a source code repository system such as GitHub.

2. AWS CodePipeline polls the source code repository and triggers an execution of the continuously delivery pipeline when a new revision is found.

3. AWS CodePIpeline sends the new revision to AWS CodeBuild which builds a Docker container image from the source code.

4. AWS CodeBuild pushes the newly built Docker container image tagged with the build ID to an Amazon ECR repository.

5. AWS CodePipeline initiates an update of the AWS CloudFormation stack which defines the Amazon ECS task definition and service.

6. AWS CloudFormation creates a new task definition revision referencing the newly built image and updates the Amazon ECS service.

7. Amazon ECS fetches the new container from Amazon ECR and replaces the old task with the new one which completes the deployment.

amazon web services

AWS Reference Architectures