

##### Deploy Node.js to AWS:Automated CI/CD Pipeline #####  
##### By Using Code Deploy & Code Pipeline #####

Requirements:

Prerequisites

- i). IAM Roles and Policies: Create IAM roles with the necessary permissions for CodeDeploy and s3 bucket ,CodePipeline.
- ii) Install codedeploy agent on specified instance.
- ii). Attach Roles and Policies specified for ec2 machines.
- iii).Node.js Application: Have your Node.js application ready with a repository (e.g., GitHub, CodeCommit).

##### Steps to Deploy #####

1.Set Up the Repository

- i). Create github connection for specify github repository for your application

2.Setup Code Deploy

- i). Create a Deployment Application: Go to the CodeDeploy console and create a new application.
- ii). Create a Deployment Group: Define a deployment group for your application.
  - Specify the EC2 instances
  - Assign an IAM role with the necessary permissions.

##### Steps to Codepipeline #####

3.Set Up CodePipeline

- i). Create a Pipeline: Go to the CodePipeline console and create a new pipeline.
  - Source Stage:
  - Choose the source provider (e.g., GitHub, CodeCommit).
  - Specify the repository and branch.
- ii).Deploy Stage:
  - Choose AWS CodeDeploy as the deploy provider.
  - Specify the application name and deployment group.

#### 4. Create appspec.yaml file :

i). Create appspec.yaml and attach with github repository (Its is necessary don't forget it)

```
version: 0.0
os: linux
files:
  - source: /
    destination: /home/cloudpanel/htdocs/mono-test/ubuy_mono_repo
hooks:
  BeforeInstall:
    - location: scripts/before.sh
      timeout: 300
      runas: ubuy-mono
  AfterInstall:
    - location: scripts/after.sh
      timeout: 300
      runas: ubuy-mono
```

Note: Choose user on basis of requirement.

Note: Create script on the basis of requirement and scenario.

Note: Prefer this referral url for appspec.yaml file.

<https://docs.aws.amazon.com/codedeploy/latest/userguide/reference-appspec-file.html#appspec-reference-server>