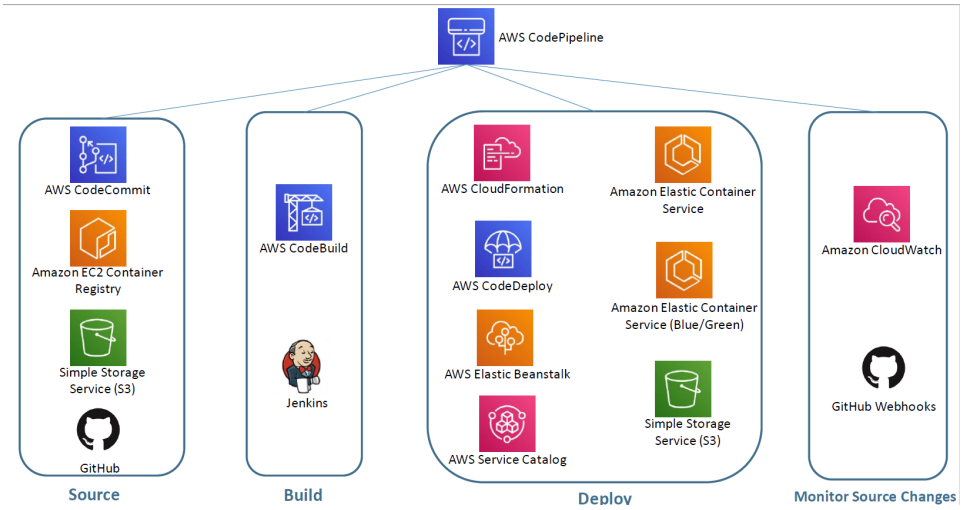
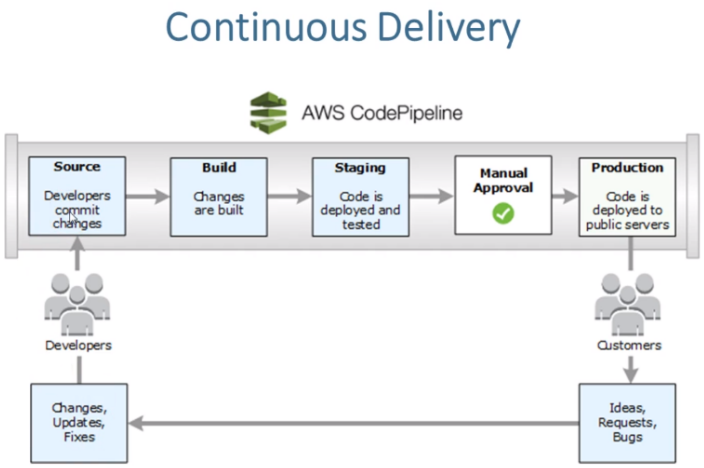
4. CI/CD in AWS - Part III

CodePipeline Overview



- Any changes in the Source, Code Pipeline triggers *Build* *Deploy* Stages for the new changes



Implementation

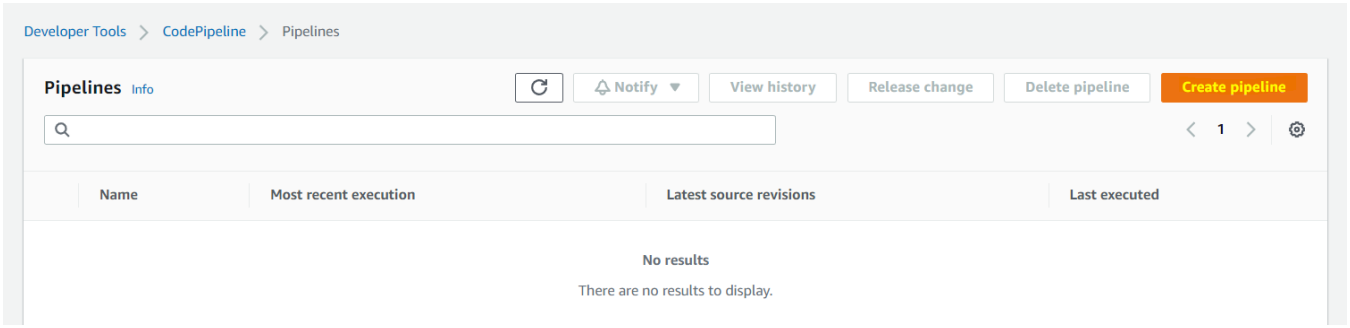
Step 1: Create a Pipeline
Here we will use Artifacts from S3, Source from CodeCommit, Build from CodeBuild, Deploy from CodeDeploy, Server from EC2 Server

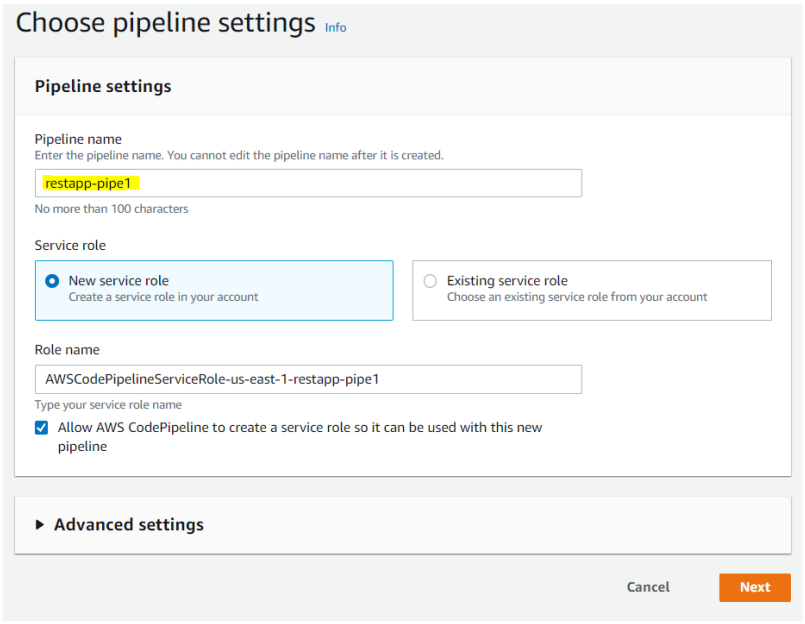
Step 2: Make changes and Check-in the code
Make changes in the source and Pipeline should be triggered automatically

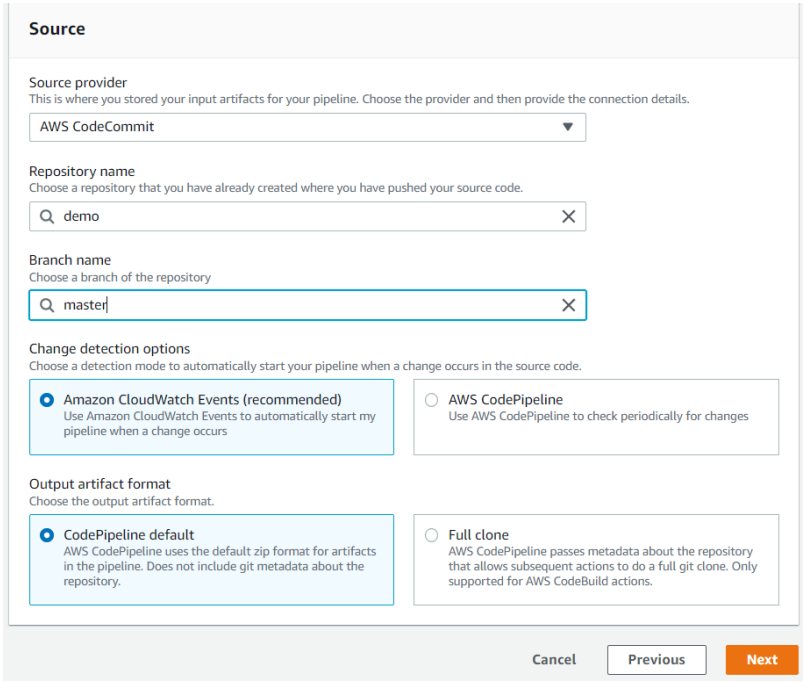
AWS Console CodePipeline

NOTE: Make a change in the source code and push it to Code Commit. By doing this, we can view the changes being picked by the Code Pipeline.

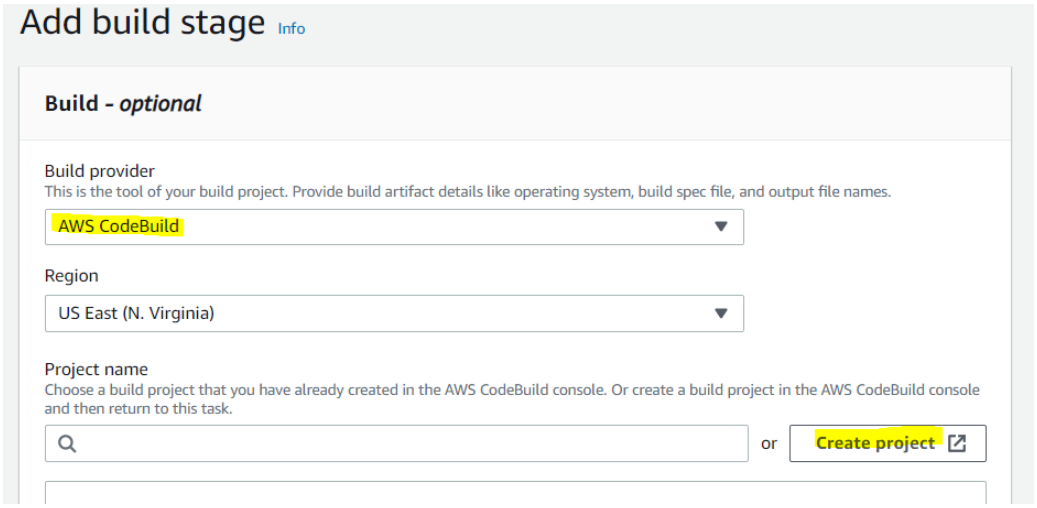
Create Pipeline Process:

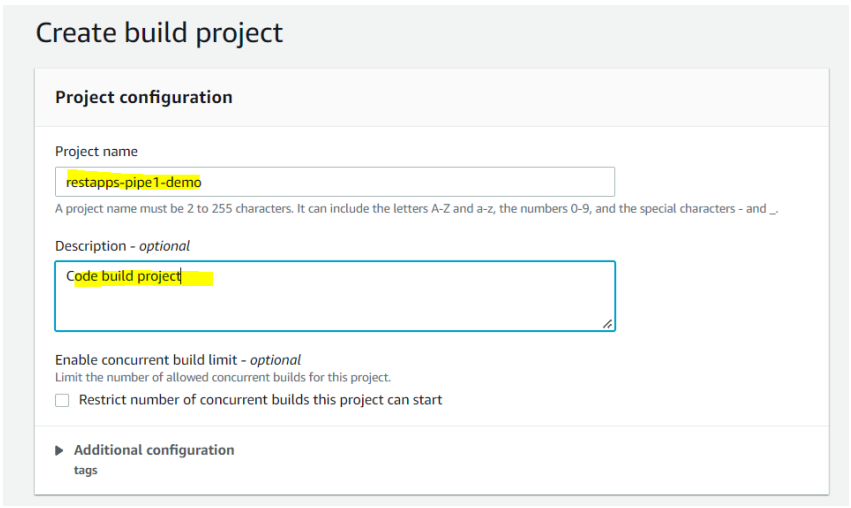


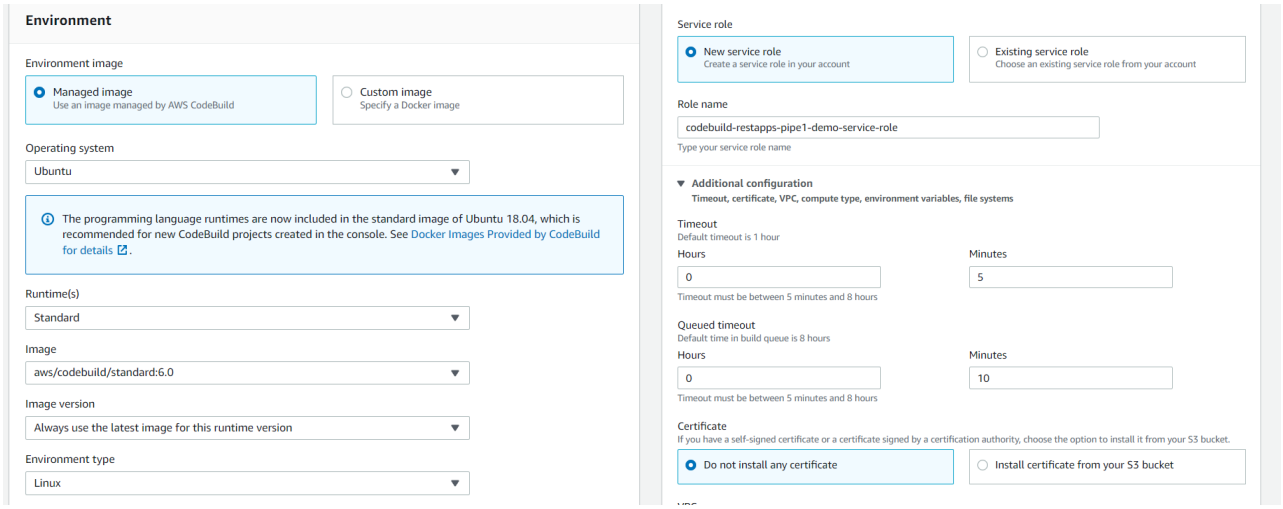


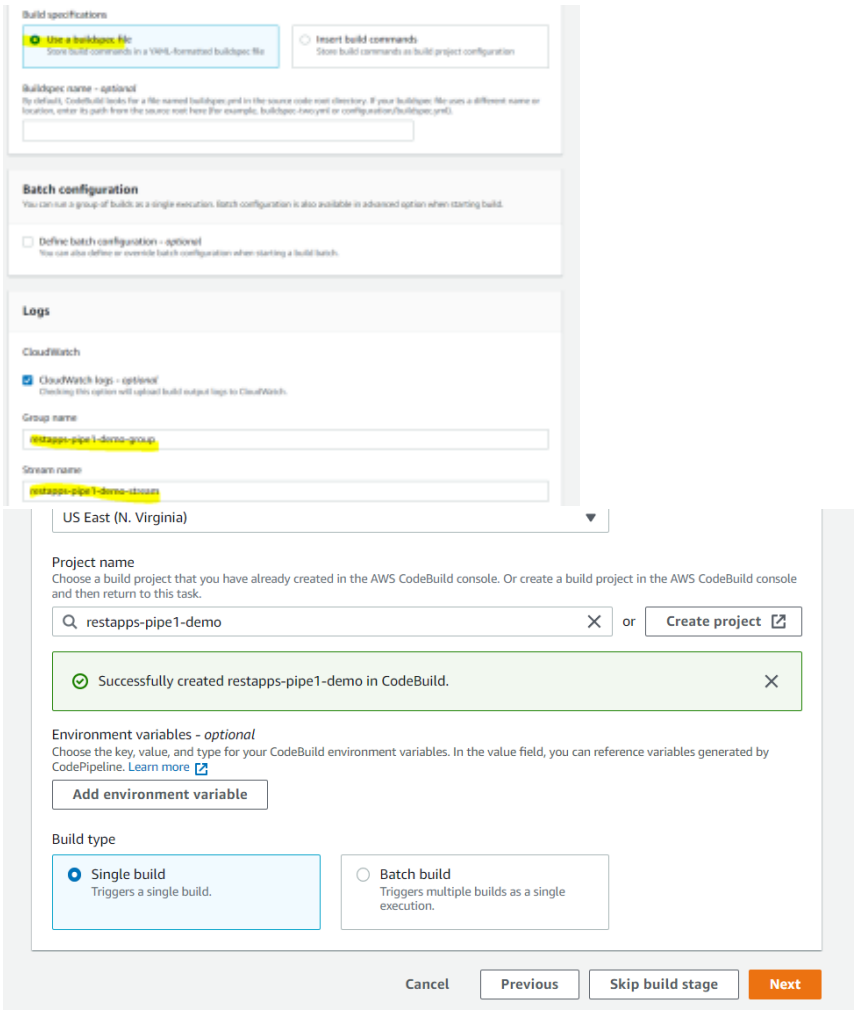


Add Build Stage.
Here Select CodeBuild and 'Create Project'. Because Existing Project may have issues with the existing S3 location mapping.

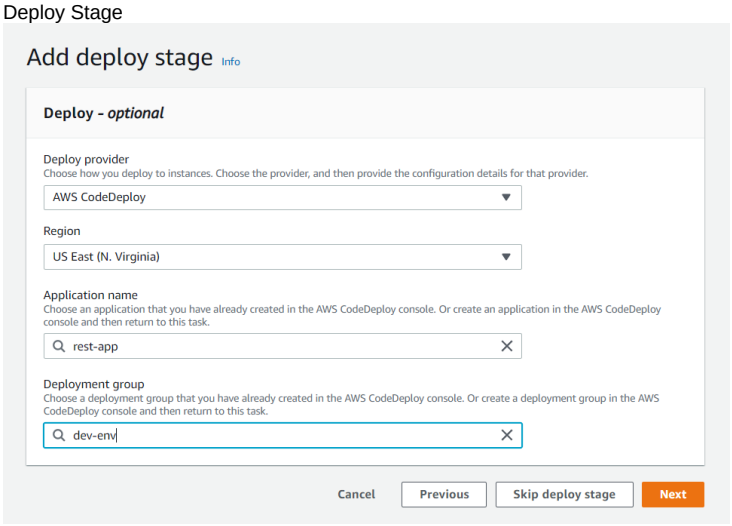

Add build stage Info
Build - optional
Build provider
This is the tool of your build project. Provide build artifact details like operating system, build spec file, and output file names.
AWS CodeBuild
Region
US East (N. Virginia)
Project name
Choose a build project that you have already created in the AWS CodeBuild console. Or create a build project in the AWS CodeBuild console and then return to this task.
or
Create project


Create build project
Project configuration
Project name
restapps-pipe1-demo
A project name must be 2 to 255 characters. It can include the letters A-Z and a-z, the numbers 0-9, and the special characters - and _.
Description - optional
Code build project
Enable concurrent build limit - optional
Limit the number of allowed concurrent builds for this project.
Restrict number of concurrent builds this project can start
Additional configuration
tags

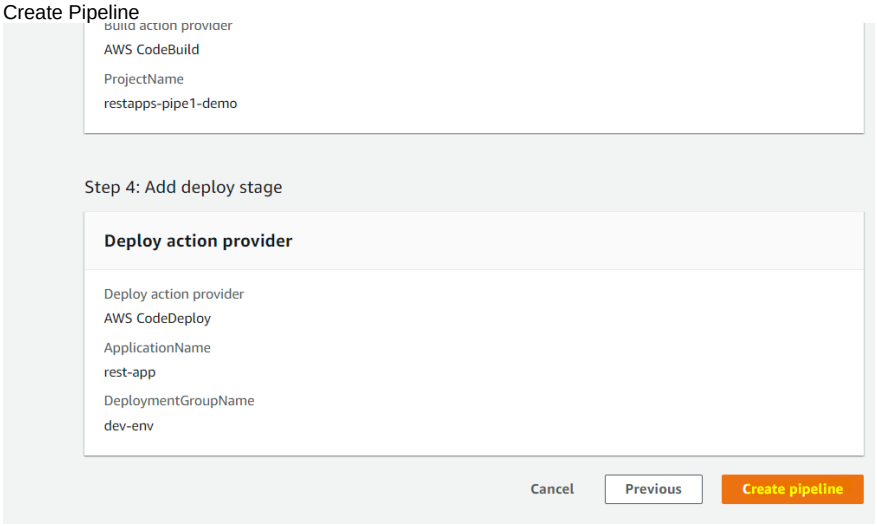

Environment
Environment image
Managed image
Use an image managed by AWS CodeBuild
Custom image
Specify a Docker image
Operating system
Ubuntu
The programming language runtimes are now included in the standard image of Ubuntu 18.04, which is recommended for new CodeBuild projects created in the console. See Docker Images Provided by CodeBuild for details.
Runtime(s)
Standard
Image
aws/codebuild/standard:6.0
Image version
Always use the latest image for this runtime version
Environment type
Linux
Service role
New service role
Create a service role in your account
Existing service role
Choose an existing service role from your account
Role name
codebuild-restapps-pipe1-demo-service-role
Type your service role name
Additional configuration
Timeout, certificate, VPC, compute type, environment variables, file systems
Timeout
Default timeout is 1 hour
Hours
0
Minutes
5
Timeout must be between 5 minutes and 8 hours
Queued timeout
Default time in build queue is 8 hours
Hours
0
Minutes
10
Timeout must be between 5 minutes and 8 hours
Certificate
If you have a self-signed certificate or a certificate signed by a certification authority, choose the option to install it from your S3 bucket.
Do not install any certificate
Install certificate from your S3 bucket



Deploy Stage



Create Pipeline



Pipeline Created. It automatically picks up the source changes and Pipeline is triggered from Code Commit