AWS CodePipeline and Webhosting through S3

1. Creating an S3 bucket through AWS

- Name the bucket.

- Uncheck the “block all public access button”

- Leave the rest of the settings as default

1. Deploy the application manually to the S3 bucket

- Navigate to the project folder from the command window

- Use the command ng build to create a dist folder.

- Upload the contents of the dist folder to the S3 bucket.

1. Configure the properties of the S3 bucket

- Click on the properties tag of the bucket, scroll to the bottom to find “enable static webhosting.”

- Type index.html for both the index and error document.

1. Configure permissions for the bucket

- Use the bucket policy pasted below to allow public access to the static website

{

"Version": "2012-10-17",

"Statement": [

{

"Sid": "PublicRead",

"Effect": "Allow",

"Principal": "\*",

"Action": [

"s3:GetObject",

"s3:GetObjectVersion"

],

"Resource": "arn:aws:s3:::bucket-name/\*"

}

]

}

1. Create the AWS CodePipeline

- Name the pipeline

- Choose “new service role” from the pipeline settings

- Choose Github Version 2 for the source provider and connect to the github

- Note that this may require admin permissions to the github repo given by COE

- Choose the repository name for the front-end repository

- Choose the branch from where the pipeline will pull the source code

- For the build provider, choose AWS CodeBuild.

- Create build project

- Name the project and give a description.

- Select “managed image” from the environment settings

- Select Ubuntu as the operating system

- Select standard runtime and latest image.

- Choose “new service role” and allow the project to build it’s own role name

- Choose “use a buildspec file” from the buildspec section

- For Logs, choose S3 logs

- Choose the previously created S3 bucket from the list

- Type “log” for path prefix

- For build type, choose single build

- For the deploy stage, choose Amazon S3 as the deploy provider

- Choose the previously created S3 bucket from the bucket list

- Click “extract file before deploy” in the deploy options

- On the summary page, review the configuration and when everything is confirmed, click “create pipeline.”

**NOTES:**

* If a step or configuration property is not mentioned in the above instructions for creating a pipeline, the default settings are sufficient.
* The dist folder must be included within the github repository for the front-end. This may require removing the file path from the gitignore file.
* ACL permissions can be managed from the permissions tab of the S3 bucket or can be written into the bucket policy file. Disabling ACL permissions will allow multiple AWS accounts to upload to the bucket.