**Hosting a Website on AWS S3 Using Jenkins Pipeline**

**Description**

how to deploy your website on AWS S3 and automate the whole process using Jenkins. So, every time you update your code, your website goes live—without you lifting a finger!

**Prerequisite**

1. An AWS account – You can sign up for free if you don’t have one.
2. Jenkins installed – Either on your local machine or a server.
3. A GitHub repository with your website’s code.
4. AWS CLI configured – This will help Jenkins communicate with AWS.

**Step 1: Setting Up an S3 Bucket for Website Hosting**

1. Create a new S3 bucket.
2. Uncheck “Block all public access”.
3. Enable “Static Website Hosting” default page to index.html.
4. Click **Save**

**Step 2: Create IAM User for Jenkins**

1. Log in to AWS Console → Go to IAM
2. Click "Users" → "Add User"
3. Enter User Name (e.g., s3-user)
4. Select Access Key – Programmatic access → Next
5. Attach Policies:
   1. AmazonS3FullAccess
6. Click "Create User" → Download Access Key & Secret Key

**Step 3: Configuring AWS Credentials in Jenkins**

1. Create a new IAM user in AWS.
2. Attach the AmazonS3FullAccess policy.
3. Create the **Access Key ID** and **Secret Access Key**.
4. Click **Save.**
5. Open cmd and run “aws configure”.

**Step 4:** **Setting Up a Jenkins Pipeline**

1. Setup AWS Credentials in Jenkins.
2. Create a Jenkins pipeline.
3. Pull your website code from GitHub.
4. Upload it to S3 automatically.
5. Copy below Pipeline code .

pipeline {

agent any

environment {

S3\_BUCKET = 'imrajandubey'

}

stages {

stage('Checkout Code') {

steps {

git branch: 'main', url: 'https://github.com/rajandubey/rajandubey.github.io.git'

}

}

stage('Upload to S3') {

steps {

withCredentials([aws(credentialsId: 'AWS\_Credentials')])

{

script {

bat '''

aws s3 sync . s3://%S3\_BUCKET% --delete --acl public-read

'''

}

}

}

}

}

}

1. Click **Save and Apply.**
2. Click **Build Now.**

**Step 5: Verify Your Website is Live**

1. Go back to AWS S3
2. copy the Website Endpoint URL under Static Website Hosting
3. Paste it into your browser

**Step 6: Live Demo**

**Step 7: Bonus – Add a Custom Domain**

Congratulations! 🎉 You’ve successfully set up an automated CI/CD pipeline to **host your website for free on AWS S3 using Jenkins**.