**Jenkins Backup and Restore on AWS S3**

Course-end Project 1

Description

To implement a reliable backup and restore process for an application data using Jenkins servers and AWS S3, ensuring data protection and easy recovery

**Real-time scenario:**

You are a DevOps Engineer at TechNova Inc., which relies heavily on Jenkins for continuous integration and deployment of its various applications. The company recently experienced a critical incident where the Jenkins server crashed, resulting in the loss of important build configurations and job data. To mitigate the risk of future data loss and ensure business continuity, you are tasked with implementing a backup and restore solution for Jenkins using AWS S3. This solution must securely store Jenkins data in S3, automate backups, and facilitate a quick restore process in case of server failure. Your tasks include setting up automated scripts for backups, configuring IAM roles for secure access, and testing the restore process to ensure that Jenkins can be rapidly restored with minimal downtime.

**Steps:**

1. Create the resources [We need one EC2 as Ansible Server, and two EC2 servers for Jenkins demo {ec2-1, ec2-2}, a security group, an S3 bucket]
2. For the Jenkins EC2s, Create an IAM role and give full access to S3 and attach them
3. Install Jenkins and Java on ec2-1&2
4. Configure Jenkins on the ec2-1 server
5. Take Jenkins backup on ec2-1
6. Restore and verify backup on ec2-2