**Terraform:**

terraform {

required\_providers {

aws = {

source = "hashicorp/aws"

version = "5.83.1"

}

}

}

provider "aws" {

# Configuration options

# eu-central-1

region = "us-east-1"

access\_key = "AKIA5FTZCNH6VM7ZC2U2"

secret\_key = "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"

}

locals {

servers = ["A", "j-old", "j-new"]

}

resource "aws\_s3\_bucket" "jenkins-backup"{

bucket\_prefix = "p-jenkins-backup"

}

resource "aws\_instance" "ansible-lab" {

ami = "ami-04b4f1a9cf54c11d0"

instance\_type = "t2.micro"

tags = {

Name = each.value

}

for\_each = toset(local.servers)

key\_name = "iitk-cmat-2025-01-26"

security\_groups = [aws\_security\_group.sg-1.name]

}

resource "aws\_security\_group" "sg-1" {

egress {

from\_port = 0

to\_port = 0

protocol = "-1"

cidr\_blocks = ["0.0.0.0/0"]

ipv6\_cidr\_blocks = ["::/0"]

}

ingress {

from\_port = 0

to\_port = 0

protocol = "-1"

cidr\_blocks = ["0.0.0.0/0"]

ipv6\_cidr\_blocks = ["::/0"]

}

name = "my-sg"

}

**Jenkins Setup:**

* sudo apt install openjdk-21-jdk -y
* sudo snap install aws-cli --classic
* sudo wget -O /usr/share/keyrings/jenkins-keyring.asc https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
* echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" https://pkg.jenkins.io/debian-stable binary/ | sudo tee /etc/apt/sources.list.d/jenkins.list > /dev/null
* sudo apt-get update
* sudo apt-get install jenkins

**EC2s**

**ec2-1**: <http://ec2-54-91-27-48.compute-1.amazonaws.com:8080/>

sudo cat /var/lib/jenkins/secrets/initialAdminPassword

sudo tar -zvcf jenkins-backup.tar.gz /var/lib/Jenkins

**ec2-2**: sudo service jenkins stop

sudo rm -rf /var/lib/Jenkins

aws s3 cp s3://**p-jenkins-backup20250126092106163700000001**/jenkins-backup.tar.gz jenkins-backup.tar.gz

sudo tar -zxvf jenkins-backup.tar.gz -C /

sudo service jenkins start

<http://ec2-3-80-31-142.compute-1.amazonaws.com:8080/>