Prerequisite

A bastion host is installed using the AWS console form where all the application and services are deployed.

IAM service of AWS is used to create a privileged user with CLI access key id and secret access key

Then aws cli version 2 is installed and aws cli configuration is done, so the access ID and secret key is not used in the code base

A key pair is created using the aws dashboard to use in the bastion host and the ec2 server that is created using the terraform code

Terraform code explanation

Key points to explain

1. Two private subnet is created for the requirement of RDS

2. Internet gateway and route table are created to provide internet access to public subnet

3. Two security group is created one for ec2 (ssh access in port 22) and other for RDS (mysql port 3306)

4. In ec2 terraform code block a selected ami is used which is specific to that (Oregon) region.

5. In RDS the engine version, instance class has to coded so that the infrastructure is compatible.