PPT-1
DEPLOY THREE-TIER ARCHITURE IN AWS USING TERRAFORM

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What is terraform

Terraform is a open-source infrastructure as a code and this software tool provides a constant comandline interface(CLI) workflow to manage hundreds of clowd services in aws . And a set of terraform configuration filesin a single directory . Even a simple configuration consisting of a single directory with one or more .tf files in a module. Then ypu will run terraform commands directly in your local directory , it will considered the root module.

Some widely using commands

1.terraform init

"it will instilise for backend"

2. terraform plan

"show changes for your current code"

3.terraform validate

"cheack your code is valid or not"

4.terraform fmt

"set to standard formate your code"

5.terraform apply

"create or update to your infracture"

6.terraform destroy

"destroy to previously created infracture"

PREREQUISITES

1.goto AWS console login to root user.
2.create a iam user and log into iam user log into iam user .
3. create a ec2 instance and connect to terminal .
4. create a directory in your local mishene
4. create a provider file inside the directory (vi provider.tf)
5. create accesskey & secretkey in providerfile or using configure command.

LIST OF FILES TO CREATE INFRASTRACTURE

1.Create a file for vpc (vi vpc.tf)

2.Create a file for subnets(vi subnets.tf)

[Create both public&private subnets]

3.Create a file for internet gateway (vi igw.tf)

4. Create a file for route table (vi route table.tf)

[route table association also create and attatch public subnet]

5.Create a file for EC2 instances (vi ec2.tf)

6.Create a file for security group (vi securitygroup.tf)

[ingress: it allow tls from 22 to 22 ipv4 anywhere protocol ssh or tcp &port 80to 80 ipv4 anywhere protocol http or tcp]

[egress: from port 0 to 0 protocol "-1" ipv6 anywhere]

7. Create a file database sequrity group (vi databasesg.tf)

[ingress: from port 3306to3306 protocol tcp ipv4 everywhere]

[egress: port 32768 to 65535 protocol tcp ipv4 everywhere]

8.Creater a file for load balancer (vi loadbalancer.tf)

[create load balancer target group & load balancer target group attatchment & loadbalancer listner]

9.create a file for Rds database (vi rds.tf)

[engine mysql & version “8.0.28” & give username and password & give db subnet group id any & give db sg id]

10 .create a file for database subnet group (vi databasesubnetgroup.tf)

[give two different availability zone subnet ids & giva a same name for db sg id]

11.create a file for outputs (vi outputs.tf)

[description : database url & value : dns id]

12. create a file for variables (vi variable.tf)

[give vpc cidr & both public and private subnets cidrs]

13.create a file for userdata (vi userdata.sh)

[#!/bin/bash &install httpd or any server stsrt and enable that & use echo command and (hostname –f) and give patn /index.html]

[apply all the resources and show a dns out put and browse it to show a output page]

THANK YOU

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