Lab-10

Creating an Aws RDS Instance in Terraform

Step 1: Create a Terraform Directory

```
C:\Users\hp>mkdir terraform-rds

C:\Users\hp>cd terraform-rds
```

Step 2: Create a Terraform Configuration Files

main.tf

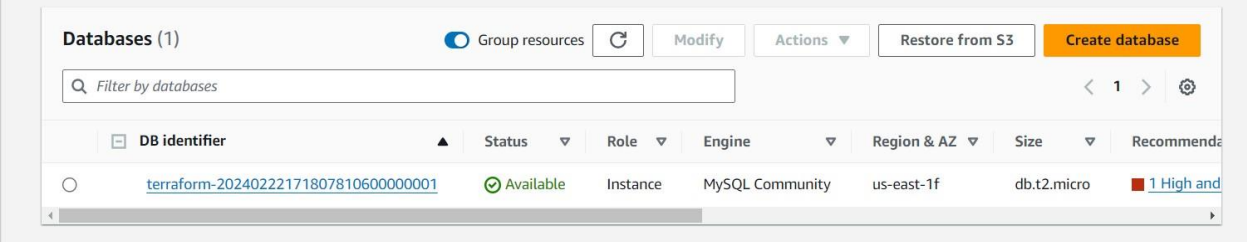
```
provider "aws" {
 region = "us-east-1"
 access_key ="AKIAV2D7UZ5ZFRSTHQHK"
 secret_key ="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"
}
resource "aws_db_instance" "My-RDS" {
 allocated_storage = 10
 db_name = "upesdb"
 engine = "mysql"
engine_version = "5.7"
 instance_class = "db.t2.micro"
 username = "admin"
 password = "AWS123"
 parameter_group_name = "default.mysql5.7"
 skip_final_snapshot = true
 }
```

Step 3: Initialize and Apply

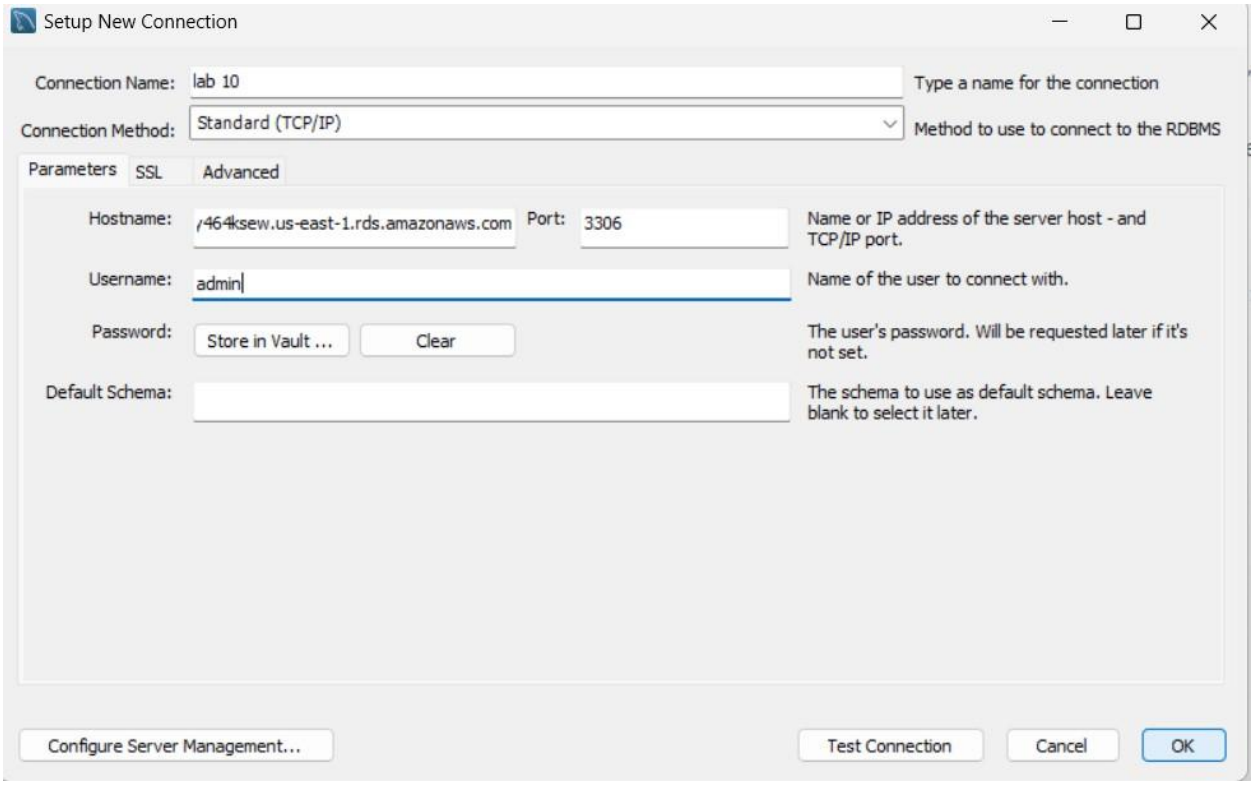
```
C:\Users\hp\terraform-rds>terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.37.0...
- Installed hashicorp/aws v5.37.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.

C:\Users\hp\terraform-rds>
```

```
C:\Users\hp\terraform-rds>terraform apply
aws_db_instance.Lab10: Refreshing state... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E]

No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration and found no differences, so no changes are
needed.

Apply complete! Resources: 0 added, 0 changed, 0 destroyed.
```

Step 4: Verify RDS Instance in AWS console



Step 5: MYSQL Workbench Connection



Step 6: Clean up

```
C:\Users\hp\terraform-rds>terraform destroy
aws_db_instance.Lab10: Refreshing state... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the
following symbols:
  - destroy

Terraform will perform the following actions:

  # aws_db_instance.Lab10 will be destroyed
  - resource "aws_db_instance" "Lab10" {
      - address                               = "terraform-20240222171807810600000001.chsoy464ksew.us-east-1.rds.amazona
ws.com" -> null
      - allocated_storage                     = 10 -> null
      - apply_immediately                     = false -> null
      - arn                                   = "arn:aws:rds:us-east-1:399699660658:db:terraform-2024022217180781060000
001" -> null
      - auto_minor_version_upgrade            = true -> null
      - availability_zone                     = "us-east-1f" -> null
      - backup_retention_period               = 0 -> null
      - backup_target                         = "region" -> null
      - backup_window                         = "08:12-08:42" -> null
      - ca_cert_identifier                    = "rds-ca-rsa2048-g1" -> null
      - copy_tags_to_snapshot                 = false -> null
      - customer_owned_ip_enabled             = false -> null
      - db_name                               = "upesdb" -> null
      - db_subnet_group_name                  = "default" -> null
      - delete_automated_backups              = true -> null
      - deletion_protection                   = false -> null
```

```
aws_db_instance.Lab10: Destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 10s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 20s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 30s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 40s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 50s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 1m0s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 1m10s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 1m20s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 1m30s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 1m40s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 1m50s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 2m1s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 2m11s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 2m21s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 2m31s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 2m41s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 2m51s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 3m1s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 3m11s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 3m21s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 3m31s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 3m41s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 3m51s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 4m1s elapsed]
aws_db_instance.Lab10: Still destroying... [id=db-YRW7H7N6UYFJKZCRUOH34WFU4E, 4m11s elapsed]
aws_db_instance.Lab10: Destruction complete after 4m13s
```