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A blue and white logo

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**Problem Statement:**

You work for XYZ Corporation. Their application requires a SQL service that can

store data which can be retrieved if required. Implement a suitable RDS engine

for the same.

**While migrating, you are asked to perform the following**

**tasks:**

1. Create a MariaDB Engine based RDS Database.

2. Connect to the DB using the following ways:

a. SQL Client for Windows

b. Linux based EC2 Instance

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1. Create an AuroraDB Engine based RDS Database.

2. Create 2 Read Replicas in different availability zones for better

infrastructure availability.

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**Problem Statement:**

You work for XYZ Corporation. Their application requires a database service that

can store data which can be retrieved if required. Implement a suitable service

for the same.

**While migrating, you are asked to perform the following**

**tasks:**

1. Create a DynamoDB table with partition key as ID.

2. Add 5 items to the DynamoDB table.

3. Take backup and delete the table.

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**Problem Statement:**

You work for XYZ Corporation. Their application requires a database service that

can store data which can be retrieved if required. Implement suitable service for

the same.

**While migrating, you are asked to perform the following**

**tasks:**

1. Create a Redshift data warehouse.

2. Using the query editor:

a. Load some data

b. Query the data

**MariaDB Assignment**

Go to AWS Management Console 🡪 RDS 🡪 Databases 🡪 Create Database

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Select MariaDB

Templates 🡪 Free Tier

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Master password is 12345678 and confirm master password 12345678

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Description automatically generated

Keep default settings for Connectivity, Tags and Database Authentication

Go to Additional Configuration

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Go to Additional Configuration

Give a name to the initial database

Firtstdb

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Keep the remaining settings to defaults and click on Create database

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Click on close

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Description automatically generatedView credentials details

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Database successfully created

It takes some time to create this database. Meanwhile download and install MySQL Workbench

MySQL Workbench installed

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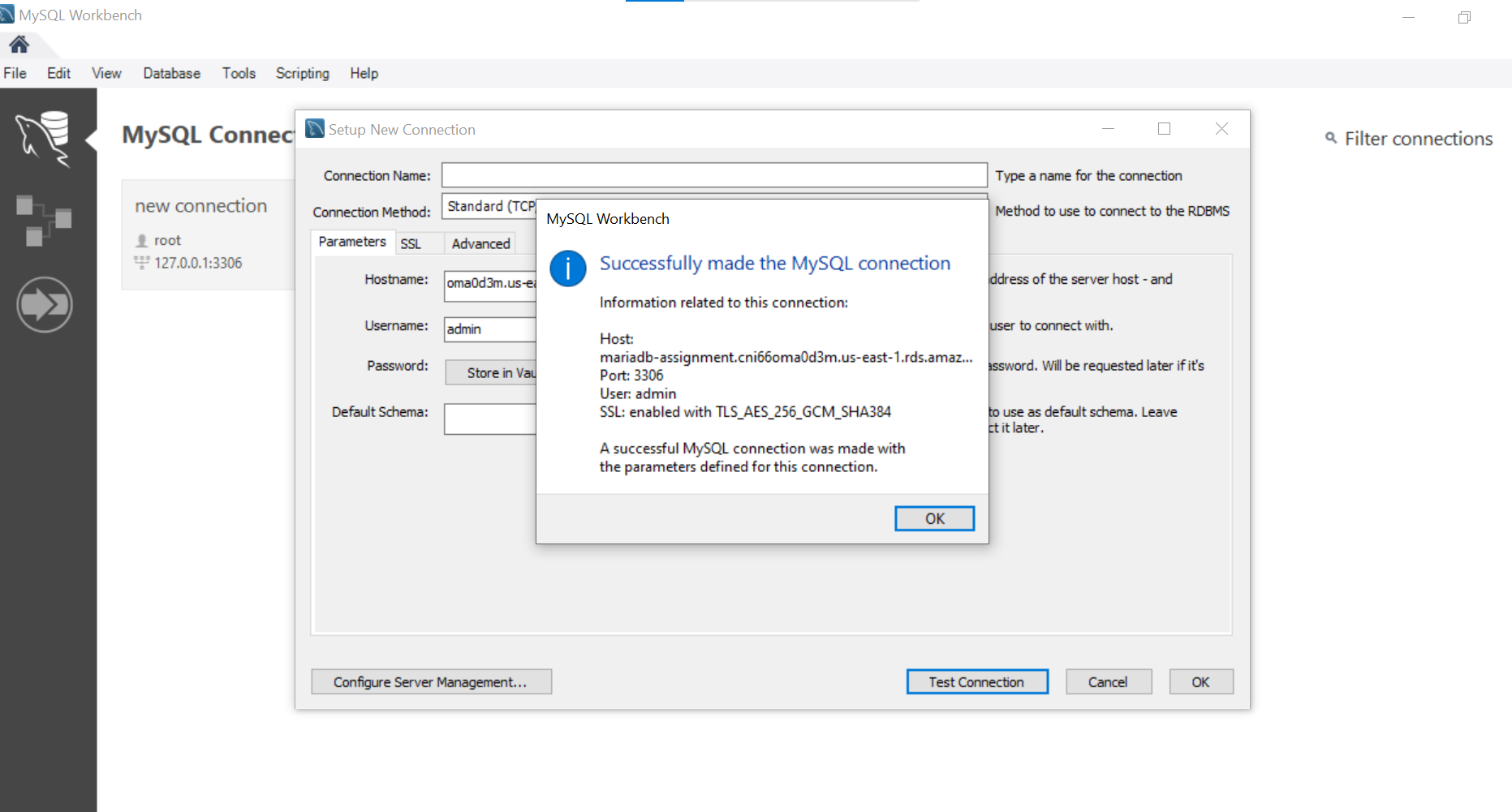
Description automatically generated

Now open MySQL workbench and enter the required details. Click on Store in Vault to enter the password

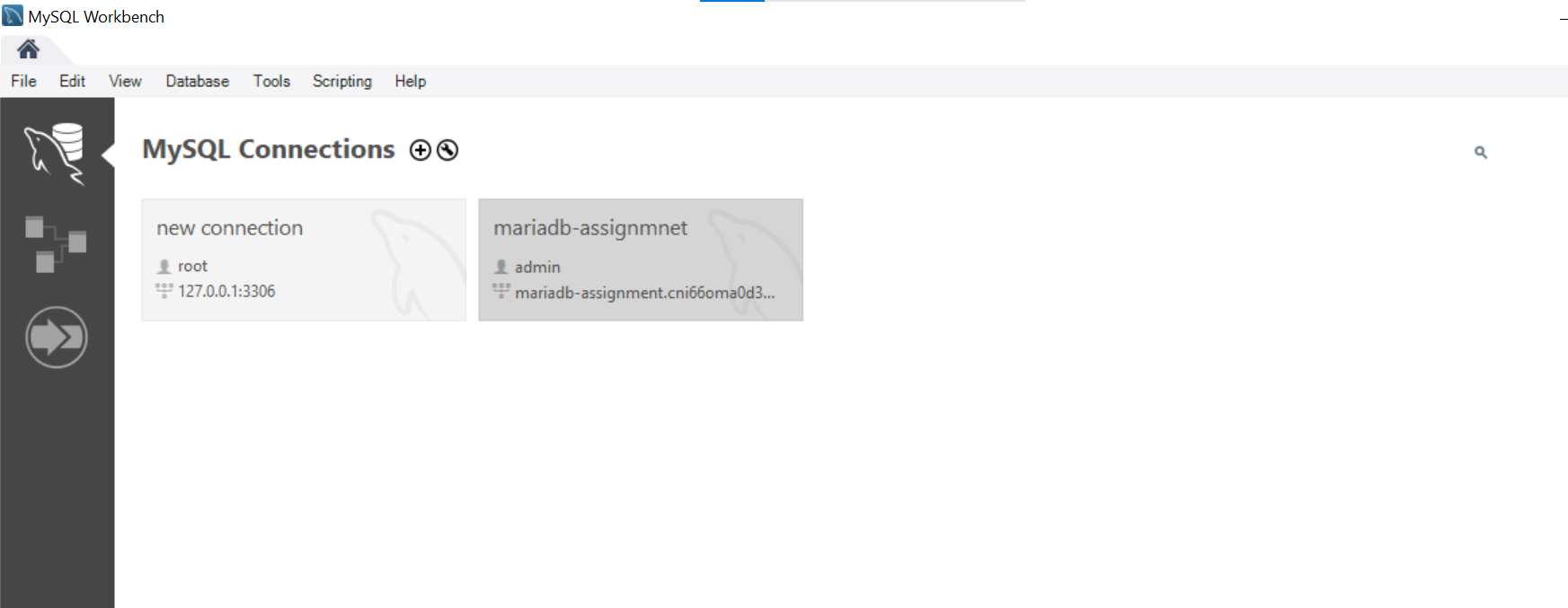
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Click on test connection



Then click on OK



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You can now run SQL queries and manage your database from the SQL client

Linux based EC2 Instance

Let’s Connect to the DB using a Linux-Based EC2 Instance. Create an Amazon Linux instance in the same VPC as the database.

Then install MariaDB client.

**sudo yum update -y >>>>> sudo yum install mariadb105 –y**

Note the **Endpoint** and **Port** from the RDS console as mentioned before.

Connect to MariaDB using the below command  
 mysql -h <endpoint> -P <port> -u <username> -p

mysql -h mariadb-assignment.cni66oma0d3m.us-east-1.rds.amazonaws.com -p 3306 -u

admin –p

**Enter password when prompted**

**12345678**

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A black screen with white text

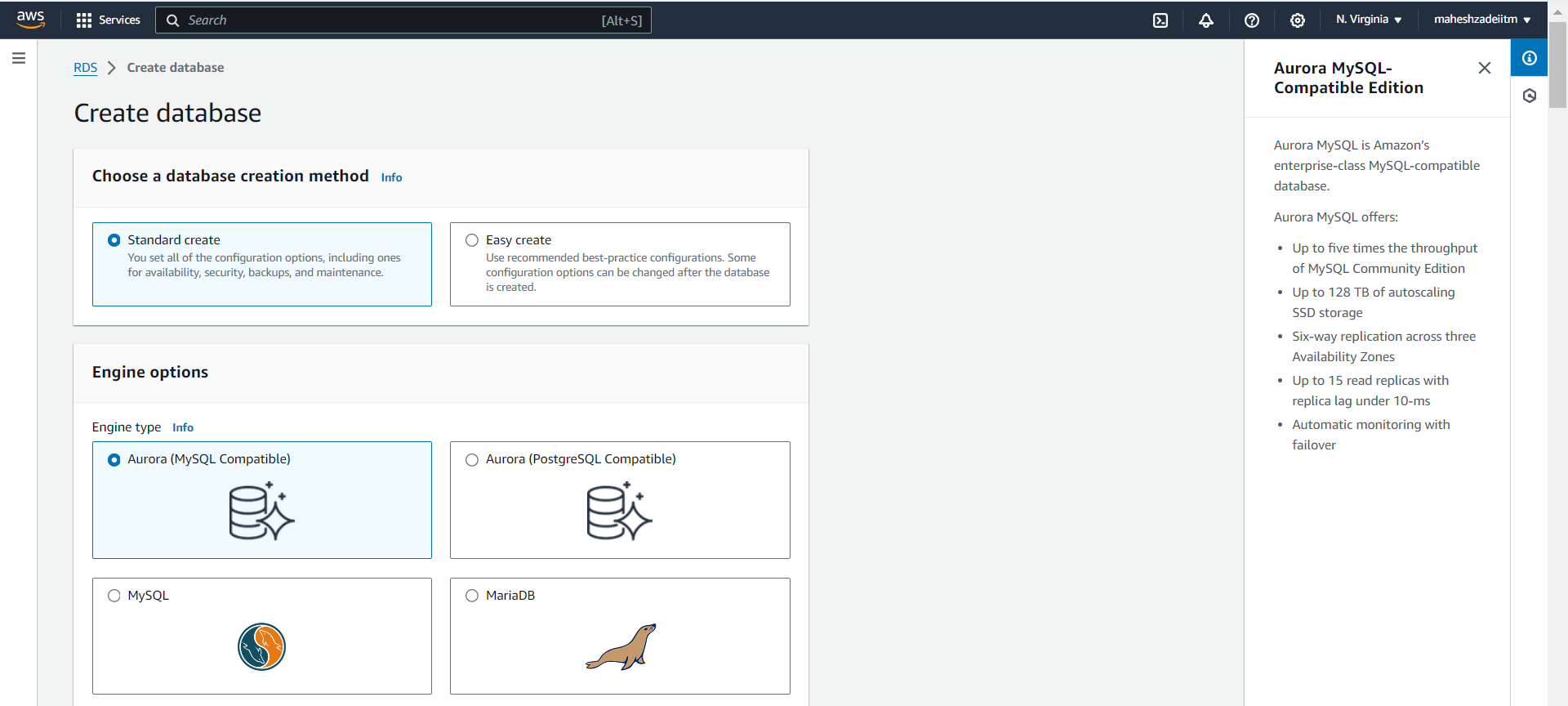
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It is successfully connected. you can run SQL commands directly from the terminal

We’ve successfully set up a MariaDB RDS instance and connect to it from both a Windows SQL client and a Linux-based EC2 instance

1. Next, we’ll do AuroraDB Assignment
2. **Problem Statement:**
3. You work for XYZ Corporation. Their application requires a SQL service that can
4. store data which can be retrieved if required. Implement a suitable RDS engine
5. for the same.
6. **While migrating, you are asked to perform the following**
7. **tasks:**
8. 1. Create an AuroraDB Engine based RDS Database.
9. 2. Create 2 Read Replicas in different availability zones for better
10. infrastructure availability.

Go to AWS Management Console 🡪 RDS 🡪 Databases 🡪 Create Database



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Master user admin

Password is admin#12345678

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Keep default settings for Connectivity, Tags and Database Authentication

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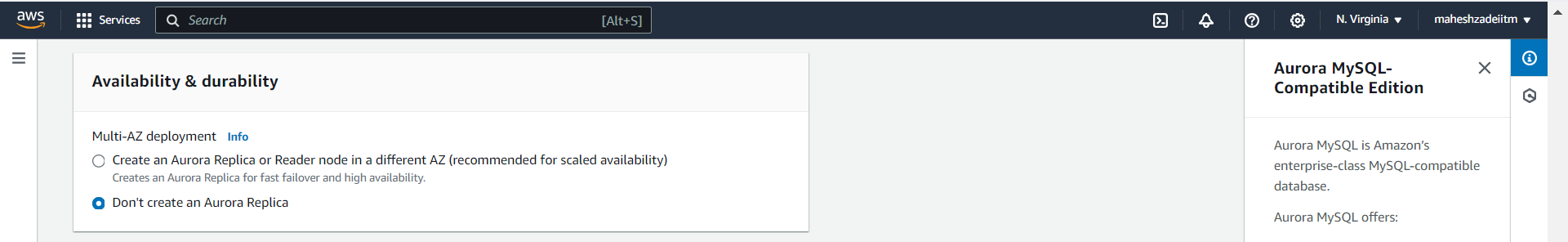
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Select db t3 .medium

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Go to Additional Configuration



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Choose default VPC

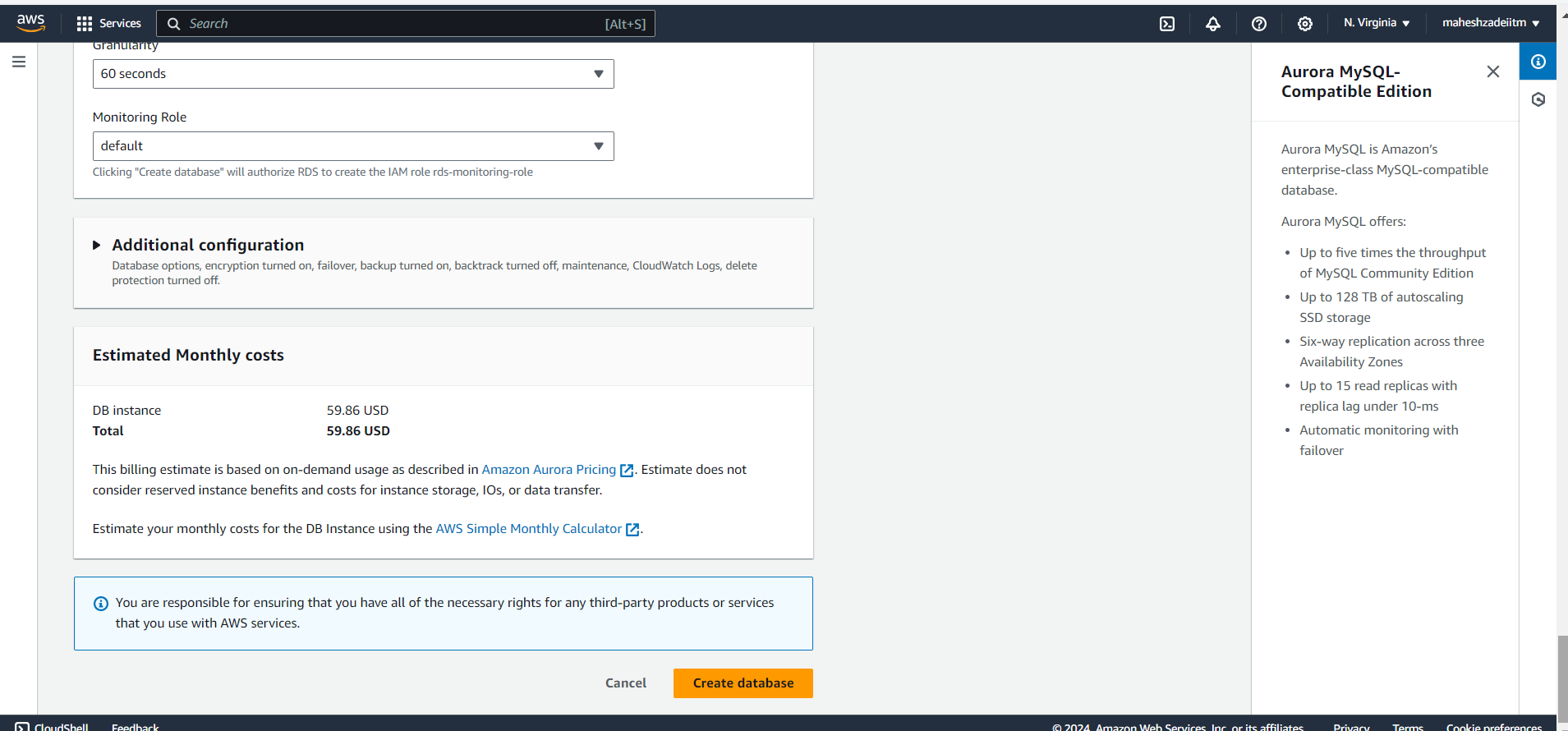
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Go to Additional Configuration

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Go to additional configuration

Give a name to the initial database.

Keep the remaining settings to defaults and click on Create

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Click create database

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Close

database is created and is available now wait till database instance created .

note endpoint name : database-1.cluster-cni66oma0d3m.us-east-1.rds.amazonaws.com

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click on view connection details

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Master username : admin

Master password : admin#12345678

Endpoing : database-1.cluster-cni66oma0d3m.us-east-1.rds.amazonaws.com

Now Let’s create read replicas in 2 different Azs. Go to Actions -> Add reader

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**Keep the remaining settings to defaults and click on Add Reader**

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Read replica is getting created. Meanwhile, we go and create another read replica in a different AZ.

Choose cluster 🡪 Go to Actions -> Add reader

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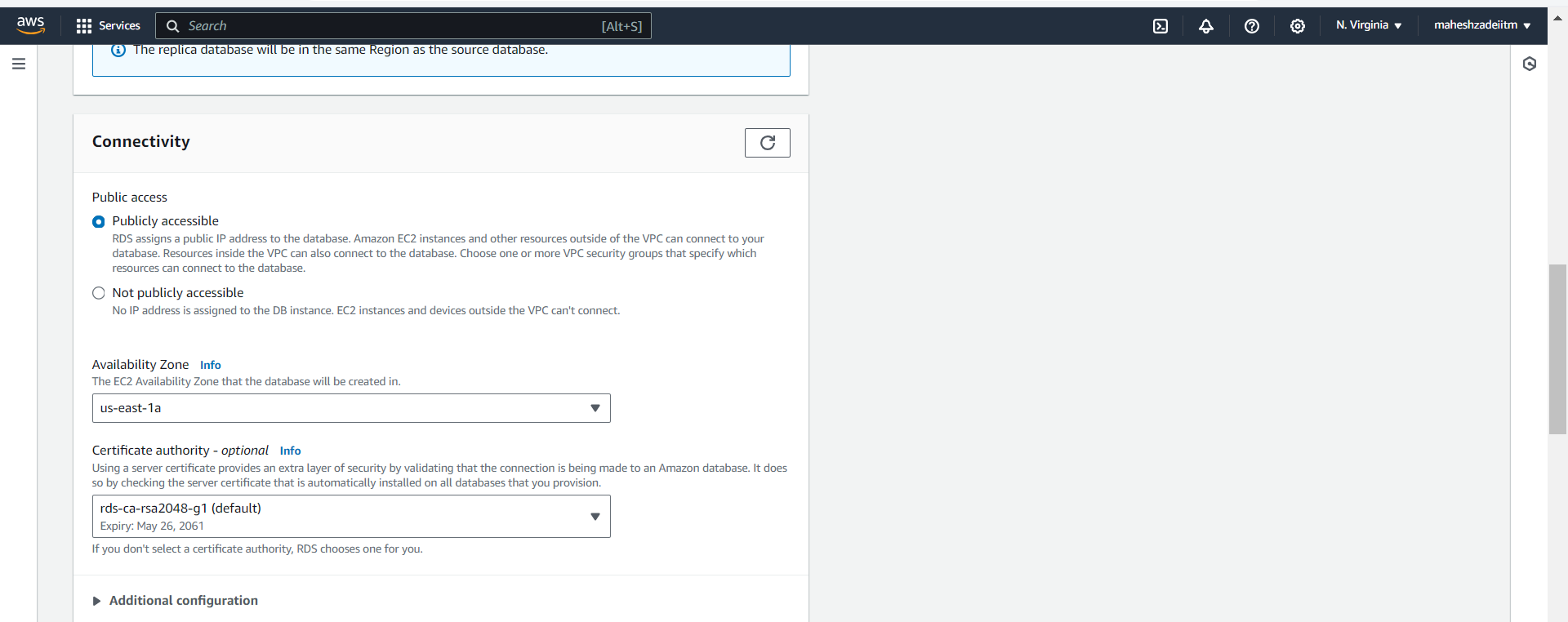
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**AZ change to us-rast-1a**

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