

Assignment 9

Problem Statement:

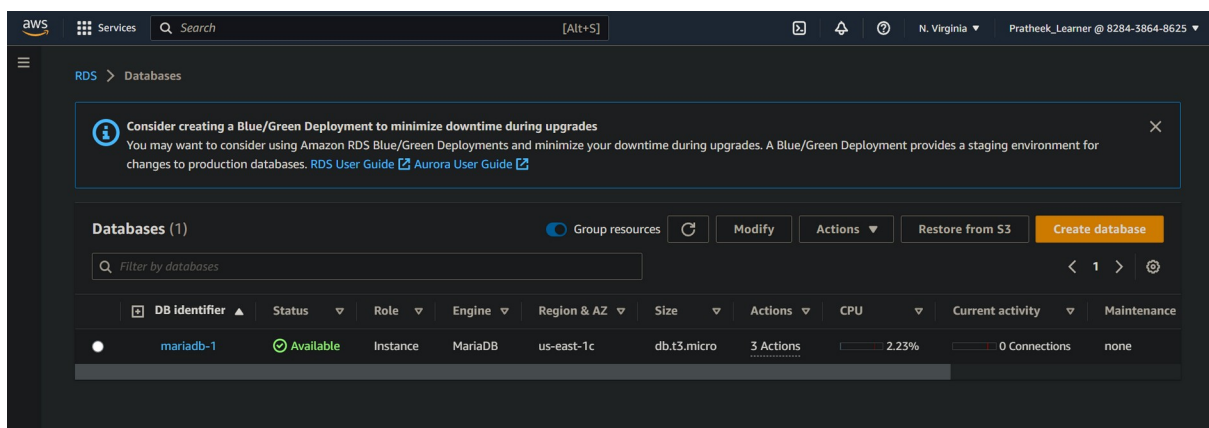
You work for a corporation. Their application requires a SQL service that can store data which can be retrieved if required. Implement a suitable RDS engine for the same.

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

Solution:

Step 1:- Goto the RDS section & select RDS option. In that select MariaDB & select all the options pertaining to free tier & select EC2 option for connection in the configuration window while creating.



Step 2: - Connect to EC2 instance to which the MariaDB is connected. Then run the following commands:

```
sudo dnf update -y
```

```
sudo dnf install mariadb105 -y
```

```
mysql -h endpoint -P 3306 -u admin -p -> Substitute the DB instance endpoint (DNS name) for endpoint, and substitute the master username that you used for admin. Provide the master password that you used when prompted for a password.
```

```
aws
Services Search [Alt+S]
N. Virginia Pratheek_Learner @ 8284-3864-8625

Verifying : mariadb-connector-c-3.1.13-1.amzn2023.0.3.x86_64 3/5
Verifying : mariadb105-common-3:10.5.18-1.amzn2023.0.1.x86_64 4/5
Verifying : mariadb-connector-c-config-3.1.13-1.amzn2023.0.3.noarch 5/5

Installed:
mariadb-connector-c-3.1.13-1.amzn2023.0.3.x86_64 mariadb-connector-c-config-3.1.13-1.amzn2023.0.3.noarch mariadb105-3:10.5.18-1.amzn2023.0.1.x86_64
mariadb105-common-3:10.5.18-1.amzn2023.0.1.x86_64 perl-Sys-Hostname-1.23-477.amzn2023.0.5.x86_64

Complete!
[root@ip-172-31-81-65 ec2-user]# mysql -h endpoint -P 3306 -u admin -p
Enter password:
ERROR 2005 (HY000): Unknown MySQL server host 'endpoint' (-2)
[root@ip-172-31-81-65 ec2-user]# mysql -h endpoint -P 3306 -u admin -p
Enter password:
ERROR 2005 (HY000): Unknown MySQL server host 'endpoint' (-2)
[root@ip-172-31-81-65 ec2-user]# mysql -h mariadb-1.cmdteboom8qa.us-east-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 119
Server version: 10.6.14-MariaDB-log managed by https://aws.amazon.com/rds/

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

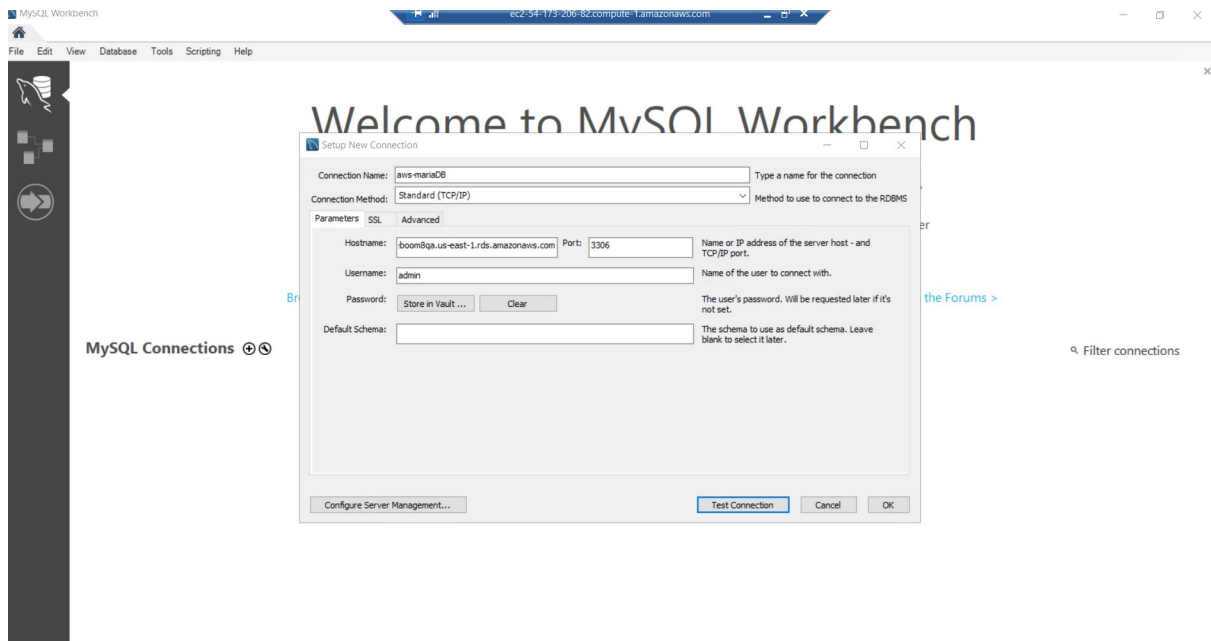
MariaDB to EC2 connection to linux system has been established.

Step 3:- Now to connect aws MariaDB to SQL windows client, download SQL client on windows OS & then use the MariaDB endpoint to connect the MariaDB.

The screenshot shows the AWS Management Console for a MariaDB instance named 'mariadb-2'. The 'Summary' tab is active, displaying the instance's status as 'Available' and its class as 'db.t3.micro'. The 'Connectivity & security' tab is also visible, showing the endpoint 'mariadb-2.cmdteboom8qa.us-east-1.rds.amazonaws.com' and port '3306'. The 'Networking' section shows the instance is in the 'us-east-1f' availability zone, connected to a VPC named 'OG_VPC'. The 'Security' section shows the instance is associated with two VPC security groups: 'launch-wizard-1' and 'ec2-rds-1', both of which are active.

Summary			
DB identifier	CPU	Status	Class
mariadb-2	1.71%	Available	db.t3.micro
Role	Current activity	Engine	Region & AZ
Instance	0 Connections	MariaDB	us-east-1f

Connectivity & security		
Endpoint & port	Networking	Security
Endpoint mariadb-2.cmdteboom8qa.us-east-1.rds.amazonaws.com	Availability Zone us-east-1f	VPC security groups launch-wizard-1 (sg-03b0d90840b11057d) ec2-rds-1 (sg-098fc8ffa31d17fbc)
Port 3306	VPC OG_VPC (vpc-0ebee9318600cac2c)	Publicly accessible Yes
	Subnet group rds-ec2-db-subnet-group-1	Certificate authority Info
	Subnets	



Select test connection, & after it is successful, press ok. So both the connection successful.

