RDS Tasks -01

- Create MariaDB DB on EC2.

```
[ec2-user@ip-172-31-16-26 ~]$ sudo dnf install mariadb105-server -y
Last metadata expiration check: 0:00:23 ago on Thu Jan 29 09:29:14 2026.
Dependencies resolved.
================================================================================
 Package                    Arch   Version                    Repository   S
================================================================================
Installing:
 mariadb105-server          x86_64 3:10.5.29-1.amzn2023.0.1   amazonlinux  1
Installing dependencies:
 mariadb-connector-c        x86_64 3.3.10-1.amzn2023.0.1      amazonlinux 21
 mariadb-connector-c-config noarch 3.3.10-1.amzn2023.0.1      amazonlinux 9.
 mariadb105                 x86_64 3:10.5.29-1.amzn2023.0.1   amazonlinux 1.
 mariadb105-common          x86_64 3:10.5.29-1.amzn2023.0.1   amazonlinux  2
 mariadb105-errmsg          x86_64 3:10.5.29-1.amzn2023.0.1   amazonlinux 21
 mysql-selinux              noarch 1.0.4-2.amzn2023.0.3       amazonlinux  3
 perl-B                     x86_64 1.80-477.amzn2023.0.7      amazonlinux 17
```

```
[root@ip-172-31-16-26 ec2-user]# sudo mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
      SERVERS IN PRODUCTION USE!  PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user. If you've just installed MariaDB, and
haven't set the root password yet, you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password or using the unix_socket ensures that nobody
can log into the MariaDB root user without the proper authorisation.

You already have your root account protected, so you can safely answer 'n'.

Switch to unix_socket authentication [Y/n] n
 ... skipping.

You already have your root account protected, so you can safely answer 'n'.

Change the root password? [Y/n] n
 ... skipping.

By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB without having to have a user account created for
them.  This is intended only for testing, and to make the installation
go a bit smoother.  You should remove them before moving into a
production environment.
```

```
[root@ip-172-31-16-26 ec2-user]# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 5
Server version: 10.5.29-MariaDB MariaDB Server

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

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

- Insert some dummy data.

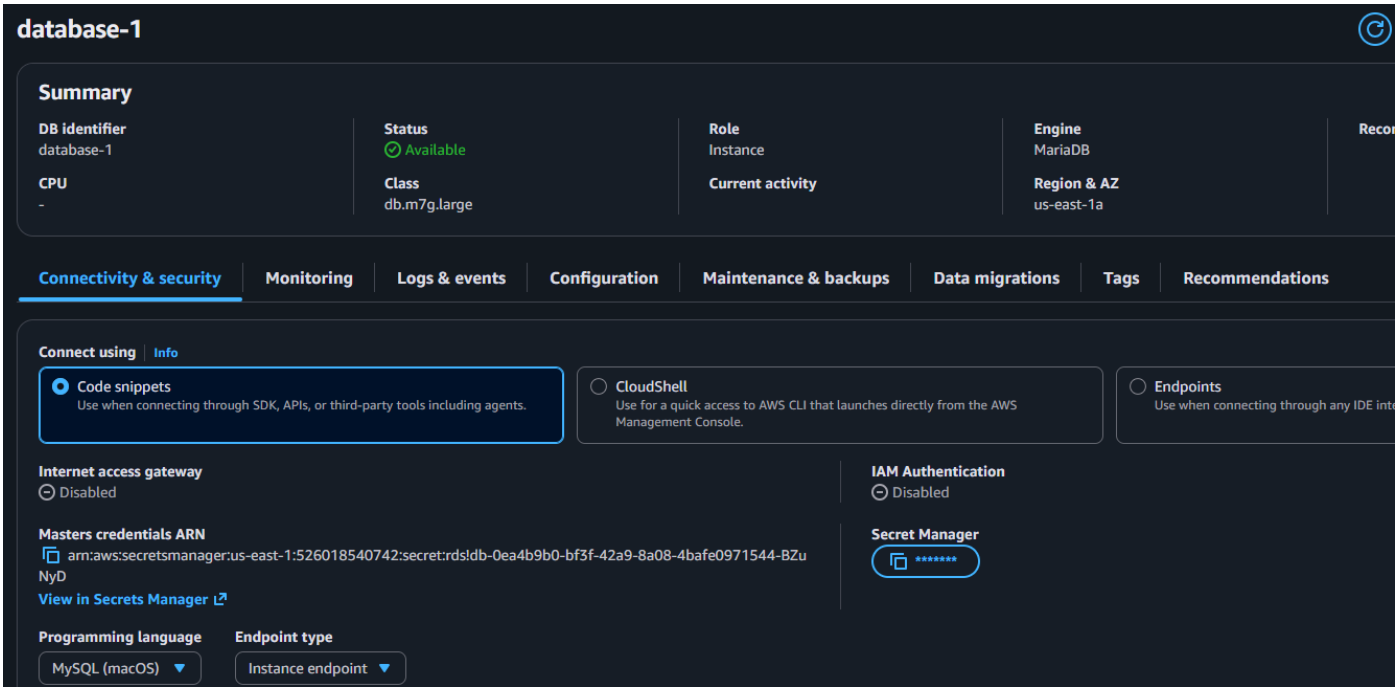
RDS Tasks -01

```
MariaDB [(none)]> CREATE DATABASE demo;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> USE demo;
Database changed
MariaDB [demo]>
MariaDB [demo]> CREATE TABLE users (
    ->   id INT AUTO_INCREMENT PRIMARY KEY,
    ->   name VARCHAR(50),
    ->   email VARCHAR(50)
    -> );
Query OK, 0 rows affected (0.008 sec)

MariaDB [demo]>
MariaDB [demo]> INSERT INTO users VALUES
    -> (1,'Alice','alice@test.com'),
    -> (2,'Bob','bob@test.com'),
    -> (3,'Charlie','charlie@test.com');
Query OK, 3 rows affected (0.002 sec)
Records: 3  Duplicates: 0  Warnings: 0

MariaDB [demo]>
MariaDB [demo]> SELECT * FROM users;
+----+---------+-----------------+
| id | name    | email           |
+----+---------+-----------------+
|  1 | Alice   | alice@test.com  |
|  2 | Bob     | bob@test.com    |
|  3 | Charlie | charlie@test.com |
+----+---------+-----------------+
3 rows in set (0.000 sec)
```

- Take the backup of dummy data on EC2.

```
[root@ip-172-31-16-26 ec2-user]# mysqldump -u root -p demo > demo_backup.sql
Enter password:
[root@ip-172-31-16-26 ec2-user]# ls
demo_backup.sql
[root@ip-172-31-16-26 ec2-user]#
```

- Launch MariaDB RDS instance.



RDS Tasks -01

- Migrate database from EC2 to RDS.

```
[root@ip-172-31-16-26 ec2-user]# mysql -h database-1.cajeseymk2i9.us-east-1.rds.amazonaws.com -u admin -p --ssl
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 45
Server version: 11.8.5-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)]> CREATE DATABASE demo;
Query OK, 1 row affected (0.004 sec)

MariaDB [(none)]> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| demo               |
| information_schema |
| innodb             |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
6 rows in set (0.001 sec)

MariaDB [(none)]> EXIT;
Bye
```

```
MariaDB [(none)]> USE demo;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [demo]> SELECT * FROM users;
+----+---------+-------------------+
| id | name    | email             |
+----+---------+-------------------+
|  1 | Alice   | alice@test.com    |
|  2 | Bob     | bob@test.com      |
|  3 | Charlie | charlie@test.com  |
+----+---------+-------------------+
3 rows in set (0.001 sec)

MariaDB [demo]>
```

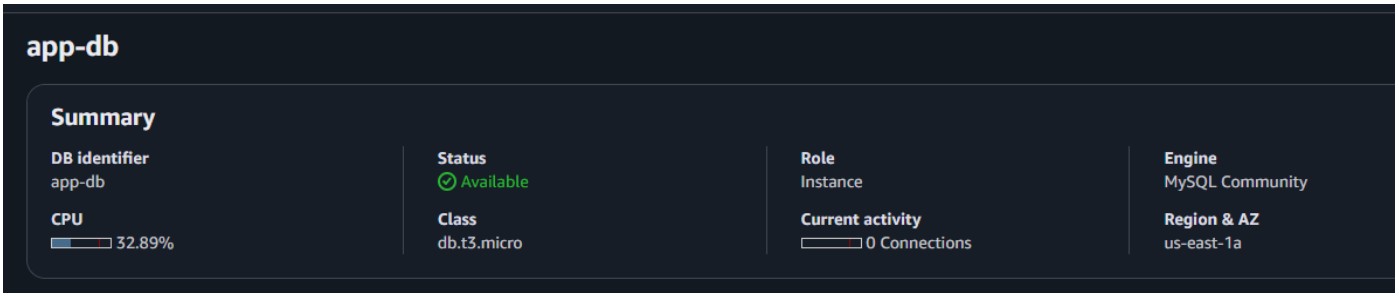
RDS Tasks -01

- Install MySQL DB on EC2.

```
[root@ip-172-31-16-26 ec2-user]# sudo dnf install https://dev.mysql.com/get/mysql84-community-release-el9-1.noarch.rpm -y
Last metadata expiration check: 1:00:31 ago on Thu Jan 29 09:29:14 2026.
mysql84-community-release-el9-1.noarch.rpm
Dependencies resolved.
================================================================================================================================
 Package                                                    Architecture                              Version
================================================================================================================================
Installing:
 mysql84-community-release                                  noarch                                    el9-1

Transaction Summary
================================================================================================================================
Install  1 Package

Total size: 13 k
Installed size: 14 k
Downloading Packages:
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :
  Installing       : mysql84-community-release-el9-1.noarch
  Verifying        : mysql84-community-release-el9-1.noarch

Installed:
  mysql84-community-release-el9-1.noarch

Complete!
```

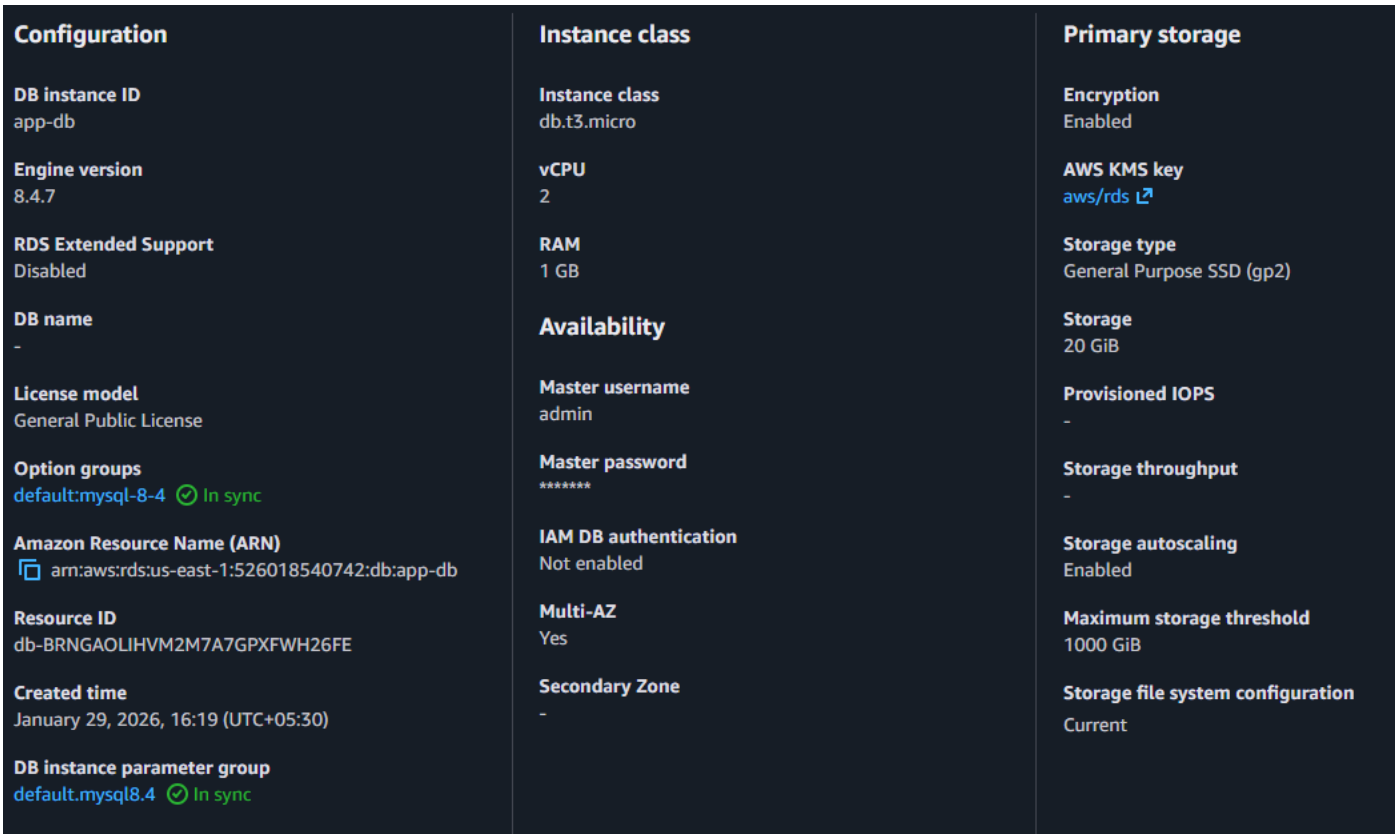
```
================================================================================================================================
WARNING:
  A newer release of "Amazon Linux" is available.

  Available Versions:

  Version 2023.10.20260120:
    Run the following command to upgrade to 2023.10.20260120:

      dnf upgrade --releasever=2023.10.20260120

    Release notes:
     https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.10.20260120.html

================================================================================================================================

Installed:
  mysql-community-client-8.4.8-1.el9.x86_64      mysql-community-client-plugins-8.4.8-1.el9.x86_64      mysql-community-common-8.4.8-1.el9.x86_64      mysql-co
  mysql-community-libs-8.4.8-1.el9.x86_64        mysql-community-server-8.4.8-1.el9.x86_64

Complete!
[ec2-user@ip-192-168-0-19 ~]$
```

- Launch MySQL RDS image.



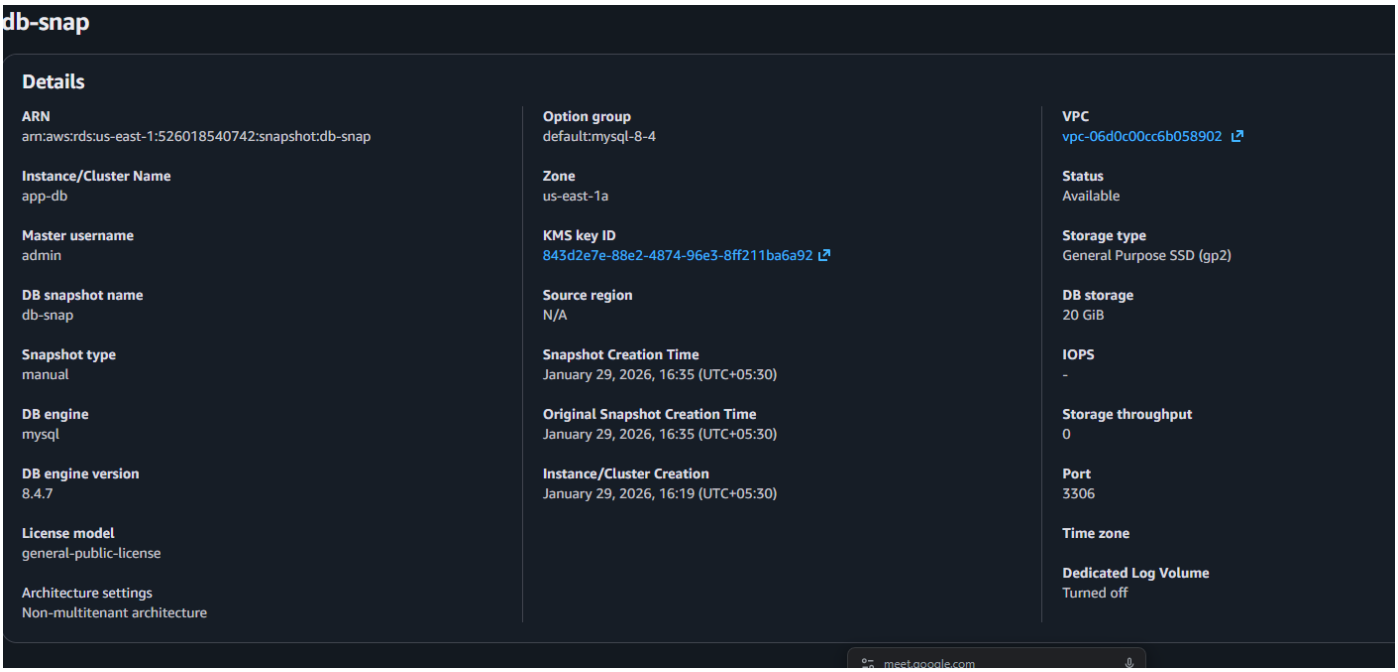
RDS Tasks -01

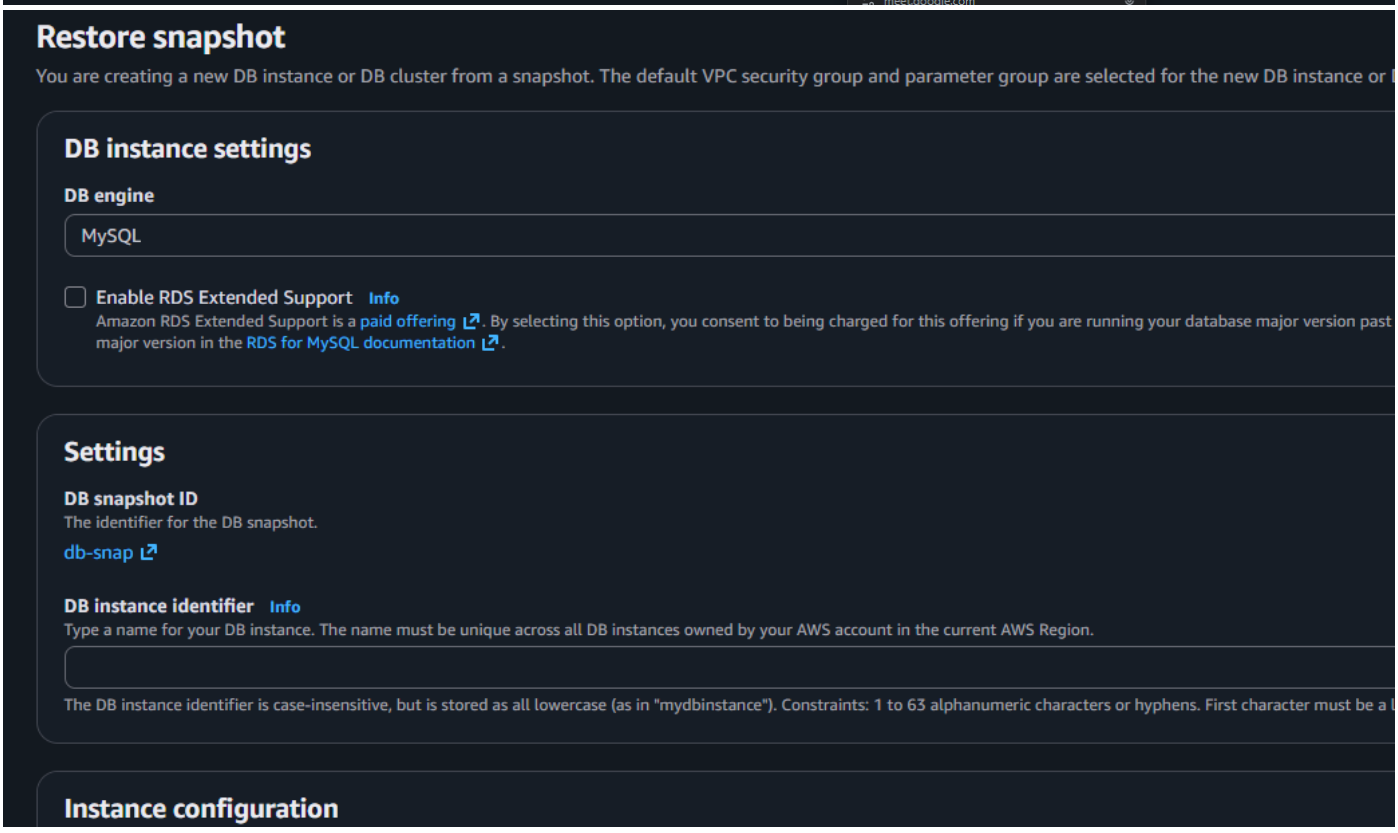
- Configure Multi-AZ.



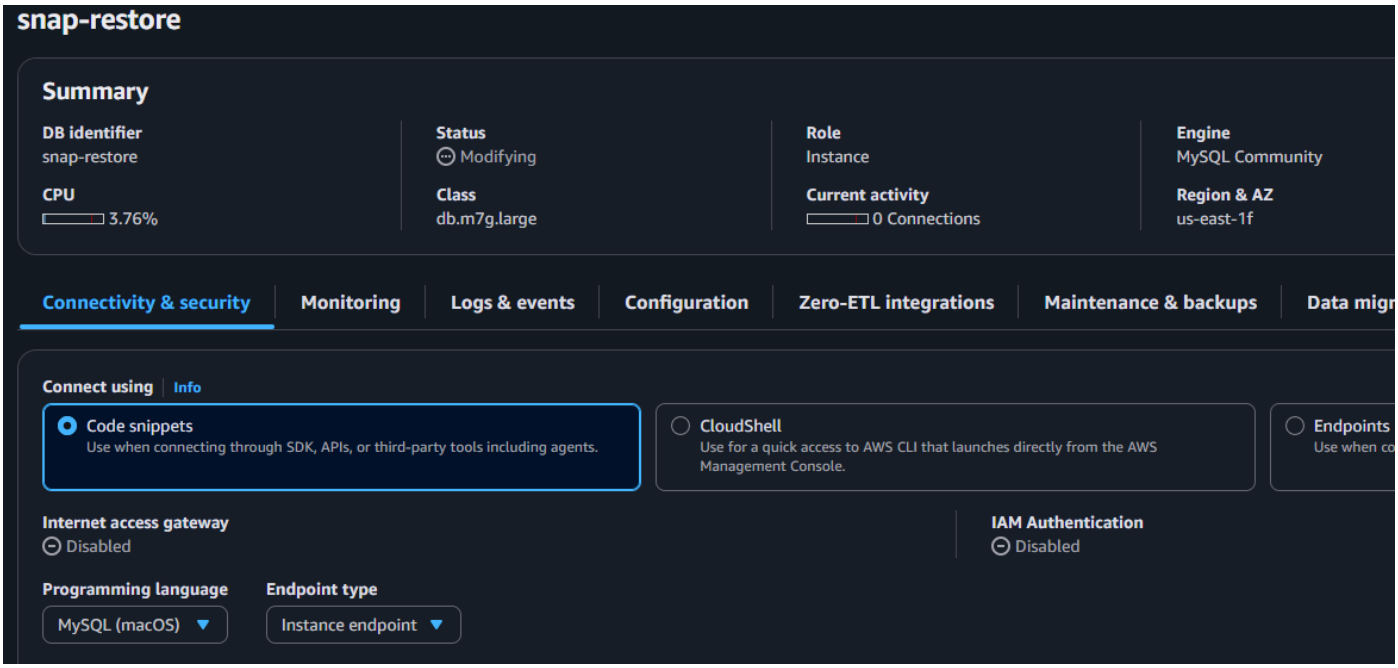
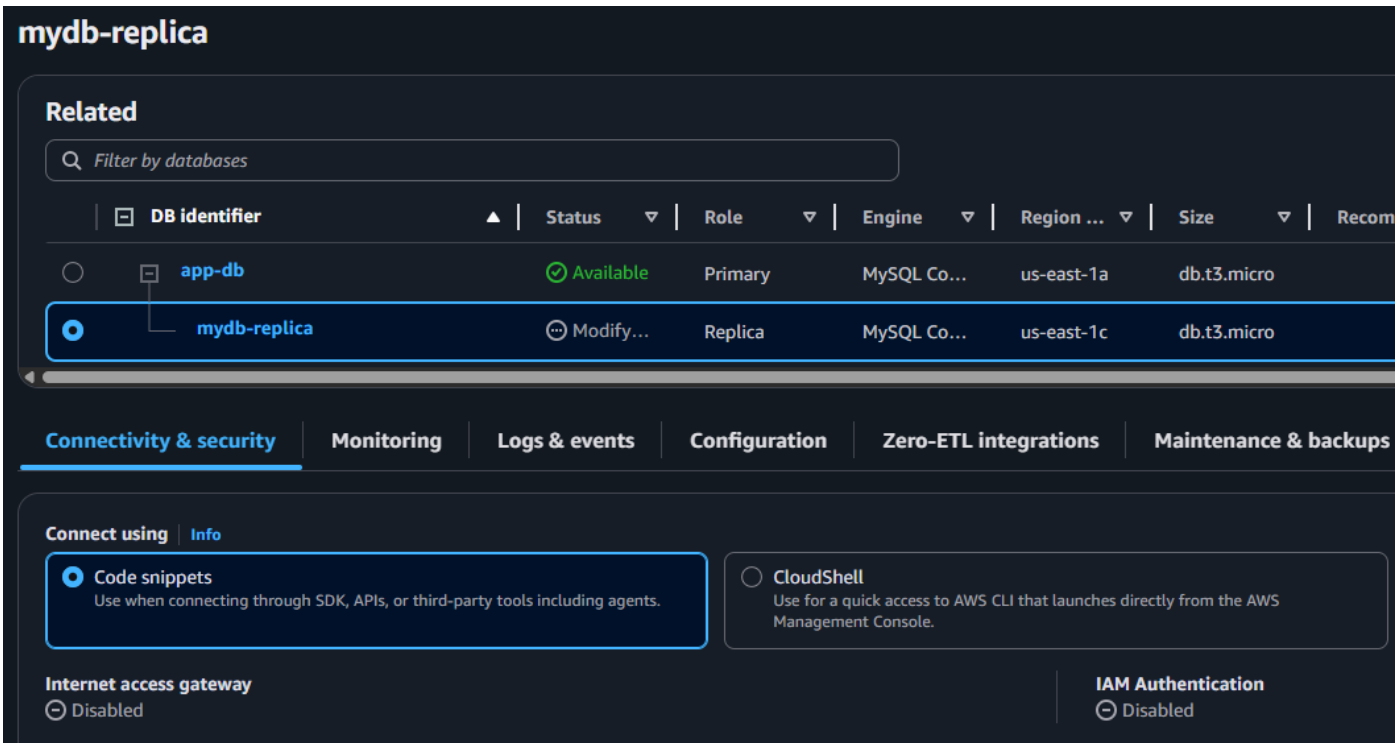
- Take backup of DB and restore the DB.

RDS Tasks -01


db-snap
Details
ARN
arn:aws:rds:us-east-1:526018540742:snapshot:db-snap
Instance/Cluster Name
app-db
Master username
admin
DB snapshot name
db-snap
Snapshot type
manual
DB engine
mysql
DB engine version
8.4.7
License model
general-public-license
Architecture settings
Non-multitenant architecture
Option group
default:mysql-8-4
Zone
us-east-1a
KMS key ID
843d2e7e-88e2-4874-96e3-8ff211ba6a92
Source region
N/A
Snapshot Creation Time
January 29, 2026, 16:35 (UTC+05:30)
Original Snapshot Creation Time
January 29, 2026, 16:35 (UTC+05:30)
Instance/Cluster Creation
January 29, 2026, 16:19 (UTC+05:30)
VPC
vpc-06d0c00cc6b058902
Status
Available
Storage type
General Purpose SSD (gp2)
DB storage
20 GiB
IOPS
-
Storage throughput
0
Port
3306
Time zone
Dedicated Log Volume
Turned off


Restore snapshot
You are creating a new DB instance or DB cluster from a snapshot. The default VPC security group and parameter group are selected for the new DB instance or
DB instance settings
DB engine
MySQL
Enable RDS Extended Support Info
Amazon RDS Extended Support is a paid offering. By selecting this option, you consent to being charged for this offering if you are running your database major version past
major version in the RDS for MySQL documentation.
Settings
DB snapshot ID
The identifier for the DB snapshot.
db-snap
DB instance identifier Info
Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.
The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a
Instance configuration

RDS Tasks -01



- Create a read replica.