Experiment 9

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Subject name: ADBMS **Subject code: 23CSP-333**

1. Aim: To create and connect a PostgreSQL database instance on Amazon RDS (Relational Database Service)

2. Objective:

- To understand the steps involved in launching a database instance using Amazon RDS.
- To configure a database for public access and connect it with a local client (pgAdmin).
- To perform basic SQL operations (CREATE, INSERT, SELECT).

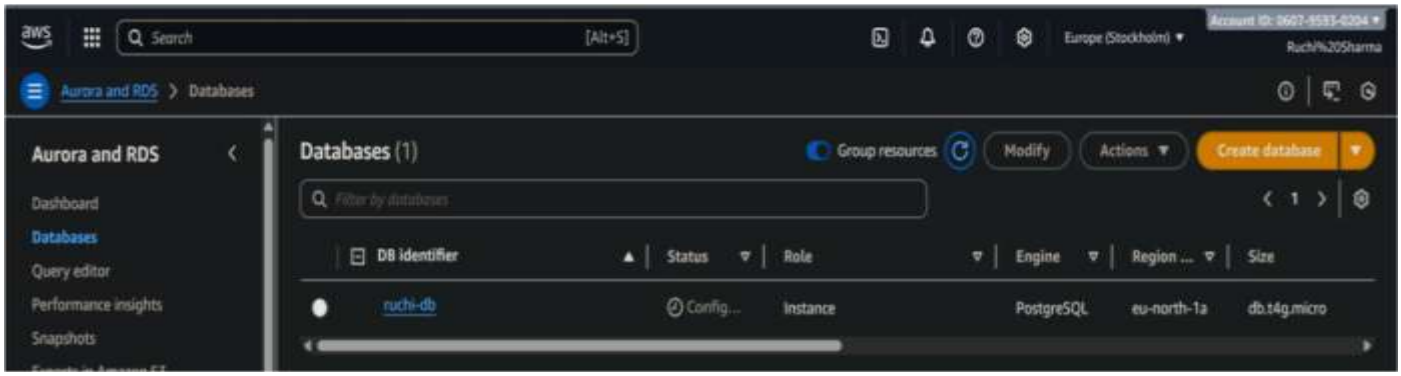
3. Tools / Software:

- AmazonWeb Services (AWS)
- PostgreSQL pgAdmin 4
- RDS (Relational Database Service)

4. Program:

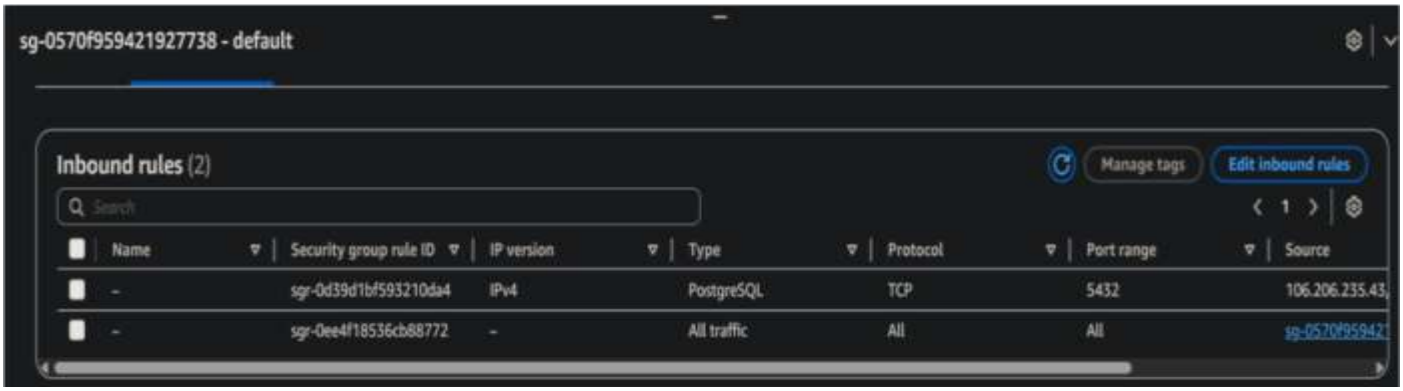
Step 1: Create and Configure Database Instance

1. Login to AWS Console → RDS → Create database, select Standard create and PostgreSQL under the Free Tier template.
2. Set DB identifier: ruchi-db, Username: postgre, choose db.t3.micro, 20 GB gp2 storage, and enable public access.
3. Click Create database and wait until the status shows Available in the RDS dashboard.



Step 2: Configure Security Group (Allow Local Access Only)

1. In AWS Console → go to RDS → Databases → click your DB (ruchi-db).
2. Open the Connectivity & Security tab.
3. Under VPC security groups, click the linked group name (it opens EC2 security groups).
4. Click Edit inbound rules → Add rule Type: PostgreSQL 5. Protocol: TCP Port: 5432 Source: My IP
6. ClickSaverules.



Step 3: Connect database using pgAdmin

1. Open pgAdmin 4 on your local system.
2. Right-click Servers → Create → Server.
3. Under the General tab, enter the name: postgre.

4. Under the Connection tab, fill in the following details:
5. Host name/address: ruchidb.xxxxxxx.rds.amazonaws.com
6. Port: 5432 Username: postgre Check Save password.
7. Click Save to connect your RDS PostgreSQL database.