EXPERIMENT- 09

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Branch: BE-CSE **Section/Group: KRG-3B**
Semester: 05 **Date of Performance: 30/10/25**
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).

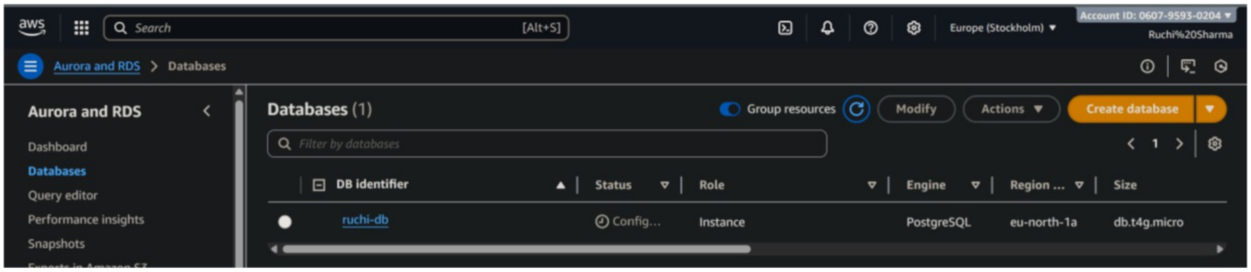
3. Tools / Software

- 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,



Databases (1)

DB identifier	Status	Role	Engine	Region ...	Size
ruchi-db	Config...	Instance	PostgreSQL	eu-north-1a	db.t4g.micro

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

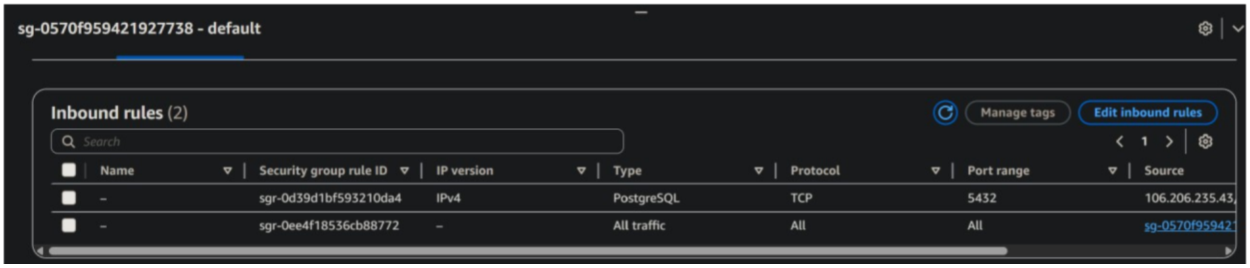
Type: ⍰ PostgreSQL

⍰ Protocol: TCP ⍰

Port: 5432

⍰ Source: My IP

5. .ClickSaverules.



sg-0570f959421927738 - default

Inbound rules (2)

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source
–	sgr-0d39d1bf593210da4	IPv4	PostgreSQL	TCP	5432	106.206.235.43/
–	sgr-0ee4f18536cb88772	–	All traffic	All	All	sg-0570f95942

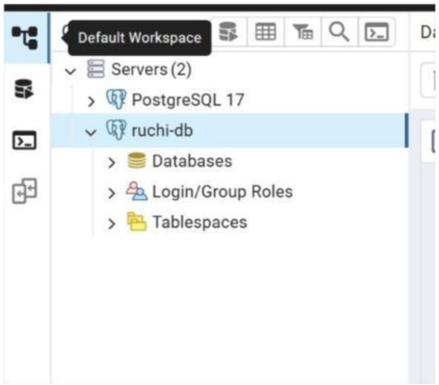
Step3:ConnectDatabaseUsingpgAdmin

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:

   ⍰ Host name/address: ruchidb.xxxxxxx.rds.amazonaws.com

   ⍰ Port: 5432 ⍰ Username: postgre ⍰ Check Save password.

5. Click Save to connect your RDS PostgreSQL database.



Default Workspace
Servers (2)
PostgreSQL 17
ruchi-db
Databases
Login/Group Roles
Tablespaces