EXPERIMENT- 09

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Branch: BE-CSE **Section/Group: KRG 1(A)**

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).□

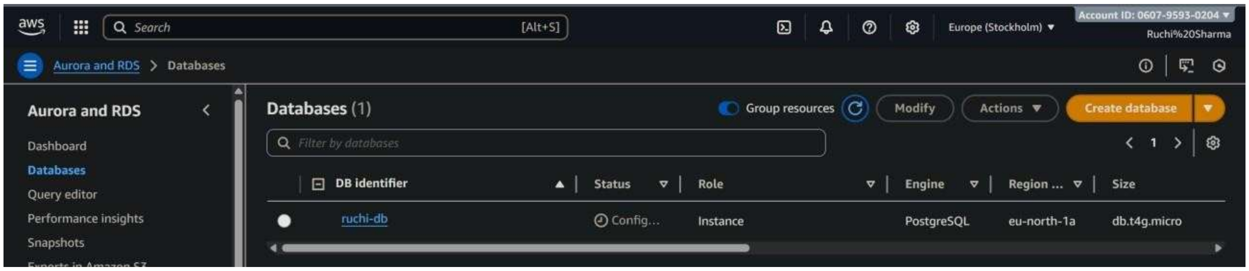
3. Tools / Software

- Amazon Web 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.



Databases (1)

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

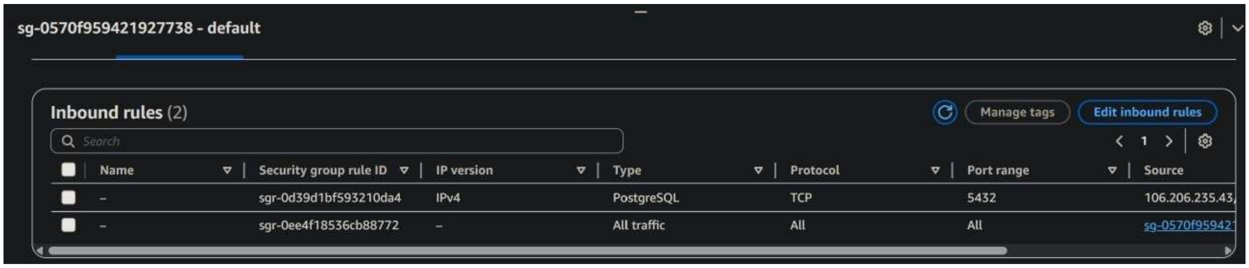
Set DB identifier: ruchi-db, Username: postgre, choose db.t3.micro, 20 GB gp2 storage, and enable Public access.

2. 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. Click Save rules.



sg-0570f959421927738 - default

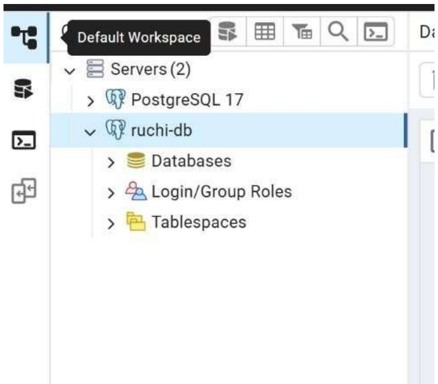
Inbound rules (2)

	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

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:
   - Host name/address: ruchi-db.xxxxxxx.rds.amazonaws.com
   - Port: 5432 ▯ Username: postgre
   - Check Save password.
5. Click Save to connect your RDS PostgreSQL database.


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