



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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EXPERIMENT- 09

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Semester: 05
Subject Name: ADBMS

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Section/Group: KRG-3B
Date of Performance: 30/10/25
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).

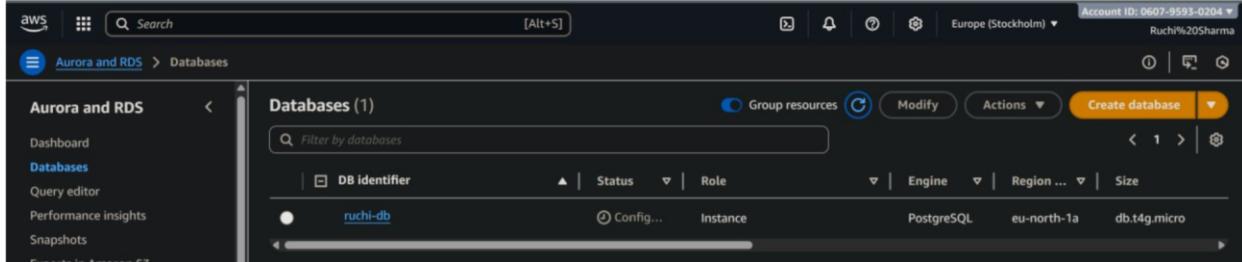
3. Tools / Software

- ❑ 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.
2. Set DB identifier: ruchi-db, Username: postgres, choose db.t3.micro, 20 GB gp2 storage,



and enable Public access.



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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.

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source
-	sgr-0d39d1bf5f93210da4	IPv4	PostgreSQL	TCP	5432	106.206.255.43
-	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: postgres.
4. Under the Connection tab, fill in the following details:
 - Host name/address: ruchidb.xxxxxxx.rds.amazonaws.com
 - Port: 5432 Username: postgres Check Save password.

5. Click Save to connect your RDS PostgreSQL database.

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graph TD; DW[Default Workspace] --> S[Servers]; S --> P1[PostgreSQL 17]; S --> P2[ruchi-db]; P2 --> D[Databases]; P2 --> L[Login/Group Roles]; P2 --> TS[Tablespaces]
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